Econ 450 Hanes Fall 2021 Additional outline and glossary terms

This document contains the additional outline that I used for the last classes, and some additional glossary terms used in the readings about the Covid crisis.

Additional outline

XIV)

5) IS curve shifts back
    - D) The Fed's response
        - 1) Interest-rate policy
            - a) Cut target overnight rate
            - b) QE (LSAPs)
        - 2) Lender of last resort to banks
        - 3) Lender of last resort to nonbanks
            - a) How to do it
                - i) Through banks
                - ii) Section 13(3)
            - b) Investment banks
                - i) Bear Stearns
                - ii) Lehman Brothers
            - c) AIG
            - d) MMMFs
                - i) AMLF
                - ii) CPFF
        - 4) Swap lines

XV) Between the 2008 financial crisis and the 2020 Covid crisis
- A) The Dodd-Frank financial reform act of 2010
    - 1) Introduction
    - 2) Provisions with respect to banks
        - a) Higher capital requirements
        - b) Liquid-asset requirements
        - c) Annual stress tests
        - d) “Living wills” (orderly resolution plans)
        - e) Publish names of LOLR borrowers with two-year lag
    - 3) Provisions with respect to nonbanks
        - a) Fed can regulate “systemically important” nonbanks like banks
        - b) “Risk-retention” in securitization
        - c) Resolution authority and bridge finance by FDIC
        - d) Fed LOLR loans under 13(3)
            - i) No more loans to individual companies
            - ii) Facilities that provide cash to many companies still OK
- B) Decline in r* (natural rate of interest)
    - 1) Review
        - a) Trend versus short-term fluctuations in r*

b) Low trend r* and effective lower bound problem

2) Review from Econ 362

a) Investment and real interest rate v. marginal product of new capital

b) Supply and demand for loanable funds

c) Open economy

3) Reasons for low trend r*

a) Supply of loanable funds: "global savings glut"

i) Aging of population (saving for retirement)

ii) Living longer (saving for retirement)

iii) Lower expected future income, so consume less now

b) Demand for loanable funds (investment)

i) Slowdown in technological innovation

ii) Slower growth in labor force

iii) Greater uncertainty about the future

iv) Production is less capital intensive

c) A tricky one: increased demand for safe assets versus risky assets

i) Fed funds rate, interest rates on bonds and loans and IS curve

ii) Increase in spread

4) Raise r*?

a) Fiscal policy (raise G, lower T)

b) Policies to raise MPK, speed up technological improvement

i) Education

ii) R & D

5) "Unconventional monetary policies"

a) Forward guidance

b) "Balance sheet policies" (QE)

c) "Yield curve ceilings (caps)"

6) Manipulate $E\pi$

a) Raise π^T

b) "Makeup" strategies

i) General idea

ii) Average-inflation targeting

iii) Price-level targeting

iv) Nominal GDP targeting

v) Problem: "time-inconsistency"

XVI) The Covid crisis of spring 2020

A) Background: the Fed and risk

1) What section 13(3) of the Federal Reserve Act says

A Fed loan to a business other than a bank must be "indorsed or otherwise secured to the satisfaction of the Federal Reserve bank...the security [collateral] for the emergency loans [must be] sufficient to protect taxpayers from losses."

2) How the Fed has interpreted this provision

B) The Covid crisis
- 1) Stock market crash
- 2) Firms need to borrow more
- 3) Lenders perceive a general increase in default risk, become more risk-averse
  - a) Lenders want to recall loans, sell corporate, MBS bonds, buy Treasuries
  - b) Default-risk and liquidity premiums get bigger
  - c) Overnight repo rates rise relative to fed funds rates
  - d) Prices of risky assets fall
  - e) Many firms' net worth falls so they can't borrow
- 4) Rollover liquidity crisis in commercial paper
  - a) CP borrowers often repay an issue by selling another issue
  - b) Potential buyers of CP fear other buyers won't buy in future
  - c) Results
    - i) CP borrowers can't sell new issues
    - ii) Outstanding issues become illiquid assets
- 5) Liquidity crisis in MMMFs
  - a) MMMFs hold commercial paper
  - b) MMMF depositors see that MMMF assets have become illiquid
  - c) MMMF deposits start to run ("outflows", "heavy redemptions")
- 6) Treasury and agency MBS bond markets
  - a) Background: what "primary dealers" do
    - i) Finance inventories with repo borrowing and capital
    - ii) Capital constrains size of portfolio ("balance sheet constraints")
  - b) Liquidity "dries up"
    - i) Bid-ask spreads widen
    - ii) Dealers just won't buy more bonds
  - c) Why this happened
    - i) Lenders less willing to make repo loans to dealers
    - ii) Dealers don't have enough capital to buy all offered bonds

C) Fed actions
- 1) To restore liquidity in Treasury and agency MBS market
  - a) Buy lots of bonds
  - b) Lend to primary dealers
    - i) Repos (overnight and "term")
    - ii) Primary Dealer Credit Facility (PDCF)
- 2) Capital requirements
  - a) Capital and liquidity requirements limit banks' lending
  - b) Fed reduces them temporarily ("relax leverage ratios")
- 3) Facilities established jointly with the U.S. Treasury
  - a) Treasury puts in money to be like capital, so can do risky things
  - b) Lend to municipalities and non-FI businesses
    - i) Make loans (or participate in loans)
    - ii) Buy bonds and commercial paper

Additional glossary terms

Agency MBS
Mortgage-backed securities (q.v.) issued and guaranteed by Fannie Mae, Freddie Mac or another GSE (q.v.), made out of conforming mortgages.

Investment grade securities
Bonds that have high ratings (indicating low risk of default), specificially ratings from AAA down to BBB-. (Bonds with lower ratings are called "junk bonds.")

Leverage ratio
This is a ratio that indicates the degree to which the assets of a financial intermediary (or another type of business) are funded by capital *versus* borrowing ("leverage"). Confusingly, the phrase "leverage ratio" is used to refer to several different specific numbers. Perhaps the most common is the debt-to-equity ratio, which is a financial intermediary's total borrowing (through deposits, loans, or bond issuance) divided by the financial intermediary's capital ("equity"). Other things equal, a financial intermediary with a lower debt-to-equity ratio is less likely to default on its borrowing.

Loan participation
Often a financial intermediary (FI) will "participate" in a loan with other financial intermediaries. Suppose that FI A participates in a loan with FI B. That means FI A provides a share of the money given to the borrower, and will receive a corresponding share of the borrower's repyaments. If the borrower defaults on the loan, neither FI A nor FI B is repaid.

Primary market, secondary market
Sales of newly-issued bonds are called "primary market." Resold bonds that were issued in the past (perhaps many years ago) are "secondary market."

Secondary market
See "primary market."