Two issues confront us

- The financial crisis
  - “Credit crisis”
  - Banks & financial institutions unwilling to lend

- The macroeconomic crisis
  - A decline in spending . . .
  - . . . that shows no sign of abating
The Credit Crisis

- What is the crisis?
  - At its most essential: unwillingness to lend

- What caused the crisis?
  - Breakdown of trust fueled by risky behavior

- What do I watch for signs crisis is abating?
  - CNBC top banner: 1 & 3 month interest rates
Why does credit matter?

- Credit = Lending & Borrowing
- Economy runs on credit

- Borrow $
- Repay $
- Pay for Inputs
- Sell Output
- Produce Output
- Pay Workers
Banks are important

- Lots of lending sources, but banks are key
- Normally, banks lend to each other
  - Federal Funds Rate
  - LIBOR (London Interbank Offered Rate)
- The crisis
  - Banks refused to lend even to each other
  - Flight to liquidity
    - Though US Federal Government bonds OK
  - The evidence
    - Interest rates
Its Genesis: Subprime Lending

- Home Loans
  - Prime
  - Alt-A
  - Sub-prime

- No down payment? No problem.
  - Borrow $300,000 at 4% $1,000 / mo
  - Reset after 2 years to 10% $2,664 / mo

- Can’t afford it? No problem!
  - Refinance at 5% $1,610 / mo

- Worked fine so long as house prices rose
But Then Prices Stopped Rising

- Unable to refinance?
  - Into default. Possible foreclosure.

- Prices stopped rising, started falling
  - Supply of houses up due to foreclosures
  - Supply up due to need to sell to avoid default
  - Demand down because less credit available

- Then Alt-A and Prime mortgages go bad too

- Estimate: 1 in 6 homeowners are now “upside down” or “under water”
  - Half of people who bought since 2003
Problem: Mortgage Backed Securities

- Bundle together mortgages; sell shares
Who Bought MBS?

- Good question
  - Banks
  - Central Banks
  - Hedge Funds
  - Any Financial institution you can name
  - Insurance Companies
  - Pension funds

- Everywhere!
Credit Crisis Peaks September 2008

First alarm:
- August 2007: European Central Bank
- Sept 2008: Merrill Lynch, Lehman, AIG fail
- Bernanke & Paulson sound the alarm
- Treasury rates hit 0.01%
- Bank lending halted

And then the stock market tanked
The Macroeconomic Crisis

- The financial crisis distracts from big problem
  - (And contributes to that problem)
  - Solving the financial crisis is “necessary but not sufficient” to solving the macro crisis

- Big problem: lack of spending
  - And no obvious way to restore spending

- Recent evidence
  - Jobs & unemployment report
  - Declaration recession began December 2007
Macro Principles 101

- Businesses produce what will be sold
  - So “aggregate demand” matters

Aggregate demand (total spending) is by

- Households: Consumption spending (C)
- Businesses: Investment in equipment & structures (I)
- Government: Government purchases of goods & services (G)
- Rest of the world: Net exports (NX) = Exports from U.S. – Imports into U.S.
Imports & Exports as a share of U.S. GDP
1930 - 2008

Source: U.S. BEA (bea.gov), National Income & Product Accounts, Table 1.1.10
Consumption Spending

- Consumption rose from 62 to 70% of total
- Consumers have sustained the economy and led the way out of recession for decades
- No more.
- Credit availability is why

- This is why this recession will be lengthy
Personal Saving Rate, 1950-2008

Collectively, we save nothing

- But many people are saving for retirement
- Some even have a 3-month emergency fund
- So how could we save nothing?

- Credit.
  - Credit cards are minor part of the story
  - Home equity lines of credit are the key
Total Revolving Consumer Credit, 1970-2008
Annual % change, seasonally adjusted

% Change
11 per. Mov. Avg.
(% Change)
Net Equity Extraction as a Percent of Disposable Income

1991 - 2008

Source: Federal Reserve, private correspondence
Investment Spending

- Structures – residential & non-residential
  - Lack of funding
  - Lack of demand

- Equipment & producer durable goods
  - Lack of funding
  - Lack of demand
Net Exports

- For recovery, we need exports to grow faster than imports
- Exports grow when world income rises
- . . . And when dollar is weaker
  - But U.S. borrowing makes dollar stronger

- Policy needed: let dollar depreciate
  - Unlikely to happen
Government Spending

- Key: purchases of goods & services
  - Employment and government contracts
- State & local cuts; federal spending can rise
- Smart spending has long-run gains too
  - Infrastructure
  - Education
  - Anything that boosts productivity
- But requires political appetite for deficits
  - And willingness of world to lend to U.S.
Don’t believe anyone’s models

- All forecasting models are fancy versions of “the future will look a lot like the past”
- But once-in-a-century events are not (well) predicted by these models
- And so recovery can’t be predicted either

- I wouldn’t necessarily believe anyone who says “In each of the past X recessions, . . . .”
Lessons from the 1930s

- Monetary policy can help, wasn’t used well in the 1930s
  - But did lead economy into post-1933 recovery
  - Alas, their quiver is currently about empty

- Fiscal policy can help, wasn’t used much in the New Deal
  - Lots of political pressure to balance budgets

- Dying firms die faster in a recession

- When the “perfect storm” hits, recovery takes a long time