ECO3223 NOTES 4/6/10

Announcements:

* Paper date is changed to next Thursday, 4/15/10
* Next HW due on 4/22/10
* Last Exam is on 4/29/10
* Paper should be in MLA

Lecture Notes

Left off talking about Mishkins speech that he gave in Israel

What events lead up to the unique incentive structure that caused the financial Crisis?

This is what Mishkin blames for causing the financial crisis we are in today:

1. Increases in Technology
2. Financial Innovation
3. Low interest rates
4. Lack of liquidity
5. Mortgage backed securities
6. Downturn in the housing market
7. Exposure of poor underwriting & lending standards
8. Property appraisers, brokers, and investment bankers had incentives to get as many people into a house as possible
9. Credit rating agencies failed to fulfill their mission
10. We begin to see inadequacies in the business models of many large financial institutions
11. Severe incentive & principle agent problems
    1. Large misunderstanding in risk appreciation
12. Liquidity and capital structure of financial institutions begins to deteriorate
13. Credit squeeze occurs and no one is able to get credit for anything
14. Large Primary dealers and investment banks experience difficulty
15. “Crisis of confidence” and a crisis of liquidity

CAUSE # :1 IMPROVEMENT IN TECHNOLOGY

* Mid to late 1990’s, the internet enables better and faster information flows this lead to financial innovation

CAUSE # 2: FINANCIAL INNOVATIONS

* Online mortgage Origination, ARM’s
* Construction boom
* MBS’s

CAUSE # 3: LOW INTEREST RATES

* Caused heavy loan demand
* Banks were lending up to their limits and wanted to lend more to meet the demand

CAUSE # 4: LACK OF BANK LIQUIDITY CAUSES THE NEED FOR MORTGAGE BACKED SECURITIES

* Banks would make mortgage loans; sell them to companies like FANNY and FREDDIE in exchange for a Mortgage Backed Security.
* These MBS’s could then be sold for cash and now banks have more money to lend out and make more mortgages
* The cycle would start all over again

CAUSE # 5: PREDOMINANCE OF MORTGAGE BACKED SECURITIES BEING ISSUED

* More and more of these Mortgage backed securities are being issued as bank write more and more mortgages to people that are high credit risks, and the web is being spun

CAUSE # 6: A DOWNTURN IN THE HOUSING MARKET

* Market quickly recognizes that homes are way over priced and the housing bubble burst
* Housing bubble burst causes the value of mortgage backed securities to plummet
* Anyoone that was holding MBS’s when they tank took huge loses
* Everyone owned these mortgage backed securities, so many people took huge losses
* This is the domino effect that took place when the price of houses tanked

CAUSE # 7: EXPOSURES OF POOR UNDERWRITING & LENDING STANDARDS

* **MORTGAGE UNDERWRITTING**: this is an objective reviewer of a mortgage that tells the bank how much of a risk a mortgage will be and whether or not they should give someone a mortgage
* Incentives all along the way for people to maximize personal interest rather than the interest of the bank in giving a bad credit risk a loan

CAUSE # 8: APPRAISERS, BROKERS, & INVESTMENT BANKERS WERE MOTIVATED BY FEE INCOME

* Appraisers, underwriters, and everyone in the financial process of a mortgage was very lax and had incentives to give out as many mortgages as possible because they financially benefited
* These three players had very little stake in these mortgages they were approving

Why would investment bankers be a problem in this process, what are they doing?

* They are underwriting the MBS and they have incentives to get these mortgage backed securities to market because they get underwriting fees on MBS’s

CAUSE # 9: CREDIT RATING AGENCIES FAIL TO FULFIL THEIR MISSION

* Talking about not just bond rating agencies but, Equifax, Experion
* They all had strong incentives to rate consumers credit as stronger than it really was so that there could be more lending activity, because they get more fee income

CAUSE # 10: BEGIN TO SEE THE EXPOSURE OF THE INADEQUICIES OF MANY LARGE FINANCIAL INSTITUTIONS

* The shit hits the fan
* The whole supply chain in the lending process is being exposed
* We begin to see severe incentive and agency problems
* Lower underwriting standards
* **Inadequate understanding in appreciation of risk** not only in the hundreds of millions of mortgages created but also the hundreds of millions of MBS’s created as well and the impact they have on the financial system

CAUSE # 11: SEVERE INCENTIVE AND AGENCY PROBLEMS

* People are motivated by their own self interest, income, fee income
* Agency problems is just referring to the principle agent problem, “who are you really working for”
* The value of MBS’s start to decrease even further as the news of them breaks in the WSJ and now the market for them tanks
* Big companies that are holding MBS’s are having liquidity issues

CAUSE # 12: LIQUIDITY & CAPITAL BEGIN TO DETERIORATE FOR FINANCIAL INSTITUITIONS

* This is when it gets really bad

How does this affect the macro economy?

NO MORE LOANS FOR ANYONE

CAUSE # 13: CREDIT SQUEEZE

* Banks unable or unwilling to lend money
* This begins to manifest all throughout the macro economy

CAUSE # 14: LARGE PRIMARY DEALERS & INVESTMENT BANKS EXPERIENCE DIFFICULTY

**PRIMARY DEALER:** they bring new securities to market

* Primary dealers were holders on MBS’s and now their balance sheets are being effected as a result of mortgage backed securities values going to shit\

**Why is this a problem?**

* Because they bring U.S. government bonds to market
* When the Gov. needs to issue debt it goes to a primary dealer
* But it can’t if primary dealers are taking heavy capital losses due to MBS’s that they own tanking in value
* This is one of the reasons the Treasury dept, and Federal Reserve bailed them out because of the macro economic effects that would take place
* We now have a full blown crisis of…

CAUSE # 15: “CRISIS OF CONFIDENCE” & CRISIS OF LIQUIDITY

* Crisis of confidence in the banking industry causes:
* People start to hold more currency
* This messes up the liquidity of banks
* The multiplier effect is halted as a result of people holding more cash
* Thus, the money supply goes down
* Banks are unable and willing to supply credit
* Liquidity problems are driving home prices down further
* The inability for consumers to get credit and high default rates among financial institutions are making it very difficult for borrowers to restructure their loans

CHALLENGES TO HOUSEHOLDS:

* Falling home prices
* Tighter credit
* People can’t buy cars
* Softer job market
* Higher energy and food prices

CHALLENGES TO BUSINESSES:

* Rising cost of raw materials
* Weaker domestic demand

SOLUTION:

* Must restore liquidity to the financial system

Flow chart in the book: CAUSES

1. Mismanagement of financial liberalization and innovation, along with
2. asset price boom and bust

Stage two

* Banking crisis

Stage 3

* Debt deflation: this has to do with falling asset prices.

What happens to your balance sheet when the market value of assets starts to fall? Your assets fall but Liabilities don’t change

So you’re net worth falls and now your debt is much higher to assets than before and you net worth falls.

THE GREAT DEPRESSION:

* 1928-1929 in this one year alone stock prices double
* Just like the housing market today
* Atmosphere in 1928-1929:
  + Assembly line production, euphoria takes holds, lots of people in the stock market that don’t know much about it
* Lots of activity in the stock market reminiscent of all the activity in the housing market in 2008
* Fed raises interest rates due to concern of the stock market bubble
* The stock market crashes in October of 1929, some have dubbed “October effect”
* Great Depression characterized by extreme drop in the stock market
* In one day 18 Billion dollars was lost
* In one week 30 Billion was lost in a week, and that was enough to pay for the cost of WWI
* Overall market lost 89% of its total value
* Americans lost 89% of their wealth
* Market made a 50% gain by 1930
* After this the agricultural sector had a shock
* This agricultural shock lead to bank failures from small up to the big banks
* Unemployment hits 25%
* Over 1/3 of all banks fail during the Great Depression
* This causes a credit squeeze and no one can get credit

WHAT WAS SPECIAL ABOUT THE GREAT DEPRESSION?

* There was no FDIC insurance making things even worse
* We also see a sharp contraction in the money supply
* Money supply contracted about 33% b/w 1929-1933
* This is a problem because it caused interest rates to rise
* We also see DEBT DEFLATION because the value of stocks people bought on margin is down but their margin loans do not change

DIFFERENCES B/W THE GREAT DEPRESSION & GREAT RECESSION

* Great depression started with an asset market crisis, the stock market crashed
* The subprime mortgage crisis started with Financial Innovation
* The current crisis would not have been so severe if it were just an asset bubble bursting. Mortgage backed securities really made this a lot worse

TERMS TO KNOW:

* **Subprime mortgage**
* **Alt-A mortgage**: borrower has better credit than a sub primer but they put none of their own money into a house
* **Debt to Equity Ratio**: lender wants to see you put some of you money down on the loan, they will do 80/20 loans, they give you 80% of a loan if you put down 20% of the amount. That is what we mean by the debt to equity ratio
* If people didn’t put anything into a home than they are more likely to now repay their loans
* Collateralized Debt Obligations: bonds whose value is derived from the value of a mortgage backed security, a financial derivative.