ECO3223 Notes

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Factoid:

* Wall Street Journal:
	+ Surprisingly confident consumers & business owners help J.P. Morgan Chase post 55% surge in profits in the first quarter
	+ Remember last Tuesday she said there was sufficient evidence that actions taken by regulators would pay off
	+ Could be the makings of a good recovery
	+ J.P. Morgan is the second largest bank in the U.S. behind BOA
* What does this mean for the banking industry?
	+ stronger earnings
* What has been the main problem for banks since the crisis?
	+ Banks capital structure has been very weak.
* Why has bank capital structure been weak?
	+ They have been writing off bad loans, & bad debt
	+ Writing off bad debt hurts your earnings
* What does decreasing earnings mean for your ability to generate capital from issuing stock?
	+ It really hurts it
* we hope to see an improvement in bank stocks

Back to chapter 19: the demand for money

* Last class we covered Keynes & fisher & now we are going to talk about Friedman & his modern quantity
* What happens to the velocity of money when we have an expansion or a recession
* What is the effect on the velocity of money during an expansion if we believe that there is a connection b/w the demand for money & interest rates?
	+ The velocity of money will rise
* Why does this happen?
	+ Because during an expansion the interest rates rise & so people will hold less currency because people will want to hold interest bearing assets so velocity will have to rise
	+ Money demand falls when returns on bonds are rising
* What is the effect on money velocity during a recession?
	+ Know that during a recession interest rates go down
	+ With that being said do you think people would hold cash or buy interest earning assets
		- They would rather hold cash

Moving on to today’s lecture

* Baumol Tobin model: this is a model of people’s money at the beginning of the month to the end of the month & refers to the Keynesian approach for the demand of money.
* Below you will see a comparison of two different scenarios consumers may choose to do with their money
* Individual A has an income of $1000 & we see that they choose to keep that in cash, this is a two month graph time horizon
	+ The shape individual A’s graph shows that as pay their bills, expenses etc. for the month their cash balance decreases
	+ Come next month we see they get their next paycheck & start all over again

* Individual B puts $500 dollars into bonds at the beginning of the month & keeps $500 in cash balances
	+ In the middle of the month individual B runs out of money & must liquidate their bonds
	+ This liquidation is indicated by the four triangles in their graph
* What is the in the velocity of money for individual A compared to Individual B
	1. Individual B will have a higher velocity of money than individual A
* Why is individual B’s velocity of money higher than individual A?
	1. There velocity is higher because they had to liquidate bonds they held in order to pay their bills
* Why does the velocity of money rise as interest rates raise?
	1. Because people will put MORE of their money into interest bearing assets because they are getting a higher rate of return, but when they don’t have enough money to pay their bills than they have to liquidate those assets & that causes the velocity of money to Rise
* There are 3 theories of money demand:
1. Classical theory of money demand
2. Keynesian theory of money demand
3. Friedman’s modern quantity of money demand

Friedman:

* Regarded as the leader of the Chicago school of monetary economics which stresses the importance of the quantity of money as an instrument of Government policy & as a determinant of business cycles
* The Chicago school stresses the relationship between volatility of the business cycle & the quantity of money
* Nobel prize winning economist for consumption analysis

So what is Milton Friedman’s Modern theory of money?

* Friedman’s theory argues that the theory of asset demand should be a factor in determining the demand for money
* He uses the theory of asset demand
* Unlike Keynes, Friedman assumed that interest rates do matter, but not very much
* He says that: the demand for money, (Md/P) are a function of income (RB-RM), (RE-RM), (Ri-RM)
* RB =the expected return on bonds
* RM =the expected return on money
* RE = the expected return on equities
* Ri = the expected inflation
* Friedman is arguing that the demand for money is not only a function of wealth but also the differential in interest rates on interest bearing assets & money
* Friedman says that it is not interest rates that matter but the difference in what you can earn on an interest rate bearing assets & what you get by just keeping your money in cash
* He is arguing that interest matter but if interest rates are so low that they are no different than holding cash then people will just hold cash

Main Point of Friedman:

1. Interest rates matter but not that much
2. Income is a very important factor in the demand for money but that income is relatively stable & therefore the demand for money will not fluctuate that much
	* 1. He gets this idea from the Permanent income hypothesis
		2. What is the **Permanent income hypothesis**?
* People make spending decision in the present based on the future income they expect to receive
* Future income expectation determines spending in the present
* If you are a student in college & you expect to be making $70,000 when you get out…
* The Permanent income Hypothesis says that you will spend money today as if you had already graduated college & started earning $70,000 even though you haven’t yet
* There is a lot of evidence that consumers are doing what the PIH said they would given the high debt ratio’s of consumers today people are not living within their means
1. Velocity of money does matter but it is **predictable**
* So if the demand for money is stable under Friedman than you can assume that the velocity of money is stable as well

BOTTOM LINE: The main determinants of the demand for money are:

* Quantity of money
* Level or income

What you need to understand about the three theories of money is the opinions among the theories about the following;

* Income as a factor
* Interest rates
* Velocity

Where does this leave us, who is right out of the three theories?

* There is evidence that interest rates do matter
	+ No evidence of a **liquidity trap**, which is an argument that interest rates don’t matter
	+ A **liquidity trap** says that the demand for money is not sensitive to changes in interest rates
	+ If that is the case than the demand curve for money would be a vertical line
	+ If the demand curve for money is vertical than a change in interest rates would cause little or no change in the position of the demand curve
	+ The whole point of bringing up the liquidity trap is to basically say that those who argue that interest rates don’t matter are WRONG
* The point that is being made is that rigid money supply targets may be unwise
* All of these theories help us to understand what monetary policy should be all about
* Monetary policy should understand the issues surrounding velocity, money demand & interest rates & that some of all three theories is valid

Chapter 22: Aggregate Demand & Supply Analysis of the Macro Economy

Aggregate demand:

* This demand curve shows the relationship between the price level & the quantity of aggregate output demanded
* This is a downward slopping curve what do we mean by that?
	+ As the price level changes the quantity of output demanded changes
	+ THIS DOES NOT MEAN THAT THE CURVE SHIFTS but instead we move along the existing curve as the price level changes
* What happens to qty demanded when the price level falls?
	+ Quantity demand of good & services in the economy & thus the income will rise
* What happens to qty demanded when the price goes up?
	+ Quantity demanded falls
* So… if P⇑, D⇓, & if P⇓, D⇑
* The classical school going back to Adam Smith argues that adjustments in prices & interest rates will stimulate the quantity demanded, as prices change qty demanded changes

Aggregate Demand Shifters:

* ***A price change WILL NOT shift the aggregate demand curve***

Things that WILL shift the demand curve:

* **Change is the Supply of money** will act to stimulate aggregate demand, why?
	+ For example, a change in the money supply due to expansionary monetary policy.
		- Expansionary monetary policy is attempting to stimulate the economy through a reduction in interest rates
		- This argues that at all price levels there will be a greater qty demanded
* **Government Spending:** will shift the demand curve
	+ Ex: Obama’s stimulus was expansionary fiscal policy where he escalated the war in Iraq, expenditures on the military, spending money on our infrastructure,
	+ Policies that are designed to put people to work, create output**,** & lower unemployment
* **Taxes:** a change in taxes
	+ Lowering taxes is expansionary & so this would shift AD to the right
	+ Increasing taxes would lower AD
* **Consumer expectations: people’s attitudes**
	+ Expectations about job prospect, inflation
	+ This is measured by the consumer sentiment index & this is followed very closely
	+ Anything that would make consumers more or less fearful about the economy in the future drives the economy in the present
* **Business optimism:**
	+ During the Great Recession (sub-prime mortgage crisis) consumer & business expectations were very low
	+ Even though interest rates were low & banks were getting infusions of capital from tarp etc.
	+ We weren’t getting demand signals coming from businesses or consumers
	+ What is a demand signal coming from the business sector?
		- The level of capital investment
		- “Should we increase our output today to accommodate the future”
* **Net Exports:**
	+ The reason for this is because the components of AD are:
		- Consumption
		- Government spending/investment
		- Net exports
	+ What would be the impact on U.S. AD if there was an increase in wealth abroad?
		- It would stimulate AD in the U.S. economy just the same as decreases in wealth abroad would lower AD in the U.S. because of the impact it would have on our Net exports

**Short Run Aggregate Supply Curve:** SRAS,

* Whys is the SRAS curve upward slopping?
	+ Because as the price level rises suppliers will supply more at the higher price
* Why would suppliers be eager to supply a higher quantity if the price level rises?
	+ Because they have fixed costs of production in the short run & so they want to get as high a price as possible
* You need to know the distinction from the short run effects & the long run effects.
* We need to bring up Keynes again: he said that “wages & prices are slow to adjust”
* Example: Consumer optimism is rising what happens to AD & SRAS?
	+ AD shifts to the right
	+ This causes the price level to go up
	+ Output increases
	+ Unemployment decreases
	+ Corporate profits are higher in the short run
* ***Unexpected*** increases in AD result in a disconnect between production cost & market prices
* This is a short run situation
* Negative effects of this surge is that we have a little bit of inflation & also this is not a good thing if we are already producing at potential GDP

She said that “you need to be able to discuss what happens to, output, price level & unemployment if AD, or LRAS, or both shifts”

**What are the factors that shift SRAS?**

* **Wage push**: wages are a cost of production, if wages go up than cost of production goes up & supply curve is shifted to the left because it now cost more to make the same output
* **Supply Shocks**: Negative & positive
	+ Cost of raw materials changes
	+ Change in weather related factors
		- Hurricane earthquake, example Haiti’s Supply curve must have undergone a huge leftward shift & made all prices higher
	+ Political disruption
		- Oil embargos, economic sanctions
	+ Remember that these can go in either direction
* **Change in the expected price level:**
	+ Why would a change in the **expected** price level be a supply curve shifter?
		- Example given in class: you hear that price levels are falling in the future what would you do about prices today?
			* You would slow down production today because you know it will be cheaper to produce in the future

What will happen in the long run to SRAS if there is an outward shift in AD?

* Increases in the cost of production will cause a leftward shift in SRAS
	+ Output: unchanged from where it was before the surge in AD
	+ Prices level: is higher than where it was before the surge in AD
	+ Unemployment: unchanged from where it was before the surge in AD

THE SELF CORRECTING MECHANISM

* To summarize a shift in AD changes the price level in the short run.
* That is the same thing as saying it has caused a change in the costs for the supply curve in the long run
* This should trigger in your mind that a change in production costs is an Supply curve shifter
* If you have a change in aggregate demand that effects prices in the long run you will have a shift in SRAS

\*\*\*\*Memorize AD shifters, SRAS shifters, & how the self-correcting mechanism works.

What does long run aggregate supply represent?

* Potential GDP, at natural rate of employment
* Potential GDP is the amount of goods & services the economy could be producing if all of its resources are being fully utilized
* “Economic nirvana”
* The self adjusting mechanism is what keeps pulling us back
* It is changes in wages & prices that cause the economy to tend toward LRAS

What shifts LARS or Potential GDP?

 Anything that changes our potential GDP

**LRAS SHIFTERS:**

* A change in the level of productive resources
* A change in technology that make existing resources more productive
* Changes in institutional framework
	+ For example & improvement in our legal system that makes companies more productive anything that raises our economic freedom will shift LRAS

“Why is LRAS a vertical line?”

 LRAS is vertical because it has nothing to do with the price level

 Notice price level does not determine your potential GDP

When we come back on Tuesday she will go over some scenarios for chapter 22