Principles of Economics

Aggregate-demand and aggregate-supply

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So in the last few chapters we went over the determinants of a national output um the determinants of a price level, productivity, employment level or unemployment rate in the economy.

Uh in the last two chapters we studied the amount of money in the economy and uh the effect on the price level.

Now, we bring together all of these discussions, uh and we will study the workings of uh the total economy um given that national output prices uh labour market interacts with each other.

In chapter 33, we will study the interaction of uh the demand by private consumers, investors, government, and uh um, consumers abroad with the producers of a goods and services in the domestic economy.

And in this discussion, we will distinguish what happens in the economy in the short run and the long run.

Um before I talk about the details, I want you to keep two things in the back of your head.

So one, in the previous two chapters we started discussion of uh short run and long run affects of monetary policy and we will see again in this chapter that in the long run, we assume there to be perfect adjustments of all economic actors to prices to government policy to the amount of money in the economy.

And on the other hand, in the short run the adjustment would not be perfect.

And uh government policy or changing price level can affect people's decision making.

So there will be two kinds of responses.

One in the short run, one in the long run there will be generally little bit different from each other.

Uh, in the last chapter when we discuss uh money neutrality and we talked about the dichotomy between real and nominal variables.

We should remember that that discussion replies only to the long run, um, in the shorter run we could get a little bit of distortions.

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And the other point I want to make is that when you are reading chapter 33, um remember everything that we learned in this course.

Both the micro economic and the macroeconomic part of uh the course.

Uh I think this is a nice review chapter uh taking what we learned about individual sectors of the economy about final goods markets and also factor uh markets.

And the discussion of the aggregate phenomena, aggregate output uh, average price level and so on.

And the same kind of uh, so from the micro economic part of the course, I want you to remember the logic, the way that supply and demand size of the market interact with each other um what determines the demand and supply curves.

Um, I want you to think back to the discussion of uh, changes along a demand curve or along a supply curve and shifts of the entire demand and supply curve.

And from the macroeconomic part of the course, you should keep in the back of your head all the definitions and uh the relationship between real variable prices and uh amount of money.

Okay. So let's start by uh discussing uh short run relationships between variables.

We say that uh in the short run economic fluctuations are irregular and unpredictable.

We do observe business cycles in the real world.

Here (pointing to his head), you could think back to chapter 28 about unemployment where we said that in the long run, there is some full employment level, which we would expect.

But in the short run, there are more sources of uh unemployment.

And um, even with a given production function, even with a given um real resource base in the economy, we could observe uh higher than usual unemployment in a short time period.

And uh business cycle when we talk about all of the economic activity in the market place, we would observe uh same kind of issue.

Most macroeconomic variables fluctuate together.

This point says that at least in the short run, there is a relationship between the patterns that we observe with national output, patterns that we observe with employment level with price level and so on.

Point three, as output falls unemployment rises.

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Uh, this relationship is uh, this statement just follows on the second statement and uh it should make us think that relationship between variables is not one to one.

There does not have to be positive relationship between um uh economic variables.

Uh some variables such as uh production level and uh unemployment rate could be negatively or maybe inversely related to each other.

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Some variables such as production level.

And unemployment rate could be negatively or maybe inversely related to each other.

Ok?

So just to repeat the dichotomy between real and nominal variables.

And the neutrality of money are only properties of long-run solutions in economy, not necessarily the short run solutions.

Let's talk a little bit about the relationship between prices and output level.

So according to the money neutrality theory, we would say that there's no

relationship between prices and we'll be variable.[?] 7:27

We will see on the next few slides that yes, this relationship holds in the long run, not necessarily in the short run.

When we discuss the workings of the aggregate economy, it is useful to draw a model of aggregate demand and aggregate supply.

And when we talk about aggregate demand, aggregate supply, here you should think that we're discussing all of the commodities and services produced in the economy.

The demand side of the problem depends on all of the consumption that takes place in the economy.

Thinking back to chapter twenty three we could say that consumption soon did aggregates output produced is used in four consumption uh...in four ways of consumption.

Consumption by private households, investment by corporations government purchases and purchases by consumers abroad

And again the personalities, private consumption can happen by households or by government

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Investment can happen by corporations but also by private individuals or by government.

Uh...exports could happen through exporting of commodities or exporting of even human labor abroad.

And thinking more about in the aggregator demand curve, we can say that there's a negative relationship between price level and consumption within on in each of these streams of consumption.

We can see that between consumption b

y private households and prices.

There is a negative relationship

We can call it the wealth effect.

Generally, the lower the price level is in the economy, the richer households feel and the more they're willing to or they're able to consume.

Relationship between price level and investment, again without going into too much technical detail, we can think that the lower price level in the economy, the more worth it.

It is for investors to invest.

We can say that effectively the price of investing, so effectively the interest rate that investors have to pay on the investment

Project is lower and it is cheaper to invest.

So with a lower price level today in the economy, investment increases.

And finally, between price level and that exports, again without going into the detail of uh...into the technical details, we can think that the lower the price level domestically for given price level abroad.

If the price level domestically false, more will be exported.

We could understand the interest-rate and exchange rate of facts even more technically if we linked, if we talked about the relationship between prices and interest-rate and prices domestically and exchange rates with the foreign currencies.

But that level of technicality is not too important for us.

Please when you are reading this book, focus on the basic understanding of the shape of the demand curve.

You don't have to understand the relationship between prices and interest rates and prices and exchange rates.

So generally, the shape of the aggregate demand curve is given by the shape of the demand, by consumers demand, by government demand, by another exporters.

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If there is a shift in one of these consumption streams, aggregate demand curve can shift in the economy.

Now let's an switch to talking about aggregate supply.

So in the long run, we've already started that output level depends on the amount of factors of production uh....available.

So no matter what prices are or what the amount of money in the economy, we should expect a fixed but the full employment level of output.

So in the long run, we can think that aggregate supply curve is perfectly vertical, perfectly determined by the amount of resources in the economy.

In the short run however we can think that the admit supply curve is upward sloping

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Because of some of the distortions or slow adjustment process by in individual parts of the economy.

So in generally in the long run we can say that the aggregate supply curve can shift if there is a change in the amount of labor physical capital, human capital, natural resources or technological know-how in the economy.

And overtime we would expect this kind of trend.

One hand aggregate supply curve shifts to the right because the economy requires more resources make population greater, technological knowledge and so on.

On the other hand aggregate demand curve also shifts to the right because of greater number of consumers may be greater size of corporations and so on.

And so in general we would see greater equilibrium level of output in the economy and price level in the economy it really depends on the size of these stripts(?).

And in this graph where aggregate demand curve shifts faster than aggregate supply curve we observe increasing prices in the economy.

If aggregate supply curve was changing faster than aggregate demand curve we could observe deflation falling price level in the economy.

What happens in the short run.

So in the short run we can imagine that the aggregate supply curve is upwards sloping because intuitively if the price level in the economy increases produces observe that there is that the commodities that they're producing can command higher prices and they have the producers have greater incentives to produce goods and services.

If there is some a distortion between prices of inputs and prices of output goods we can talk about stickiness of prices or stickiness of wages.

We could say that if producers are holding their wages to workers constant

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And if the producers observe if prices of output of goods increase they will have greater incentives to produce commodities.

And we can say that the end then the aggregate supply curve will be upward sloping.

Suppose that for some reason aggregate demand curve shifts to the left there's some shocks to demand perhaps because of people's expectations or because of changing fashion consumers decide to buy fewer goods today.

So if we start if original started at an equilibrium A when aggregate demand curve shifts to the left in the short run we will be at an equilibrium point B with smaller output level in the economy , lower price level in the economy.

Another question is would the economy stay at this level.

First of all we should realize that well Y2 is not an efficient output level it's not the full employment output level with this output level some resources are not being used fully maybe there is more than normal level of unemployment.

And we would want the economy to adjust in some way to achieve the original level of output.

And it turns out that as the economy moves from point A to point B some prices become lowered there is some distortion between how quickly prices in the economy adjust.

Eventually costs prices of input good and wages of workers get lowered enough producers in the economy start feeling that their cost of production are very low.

Perhaps of prices of output goods have not fallen as much and producers will be willing to provide more output whatever the price level in the economy.

So we could observe aggregate supply curve to shift to the right.

So as a consequence of this adjustment process in prices aggregate supply curve could be expected to shift to the right eventually and the economy would move to another long run equilibrium with the same original output level but lower price level.

And this graph illustrates that if there is any change on the demand side of the market the supply side of the market will adjust itself to(19:30) still achieve full employment level full employment output level.

And only the price level in the economy can differ, ok?

In the long run equilibrium we can summarize that, the economy produces its natural rate or full employment rate of the output.

And depending on the exact shape of the aggregate demand curve, we will have some equilibrium price level or equilibrium level of inflation.

Now, let’s look at a situation when, aggregate supply curve shift to the left.

Suppose that there is a shock to the employment market.

Suppose one resource, becomes one factor in production becomes unavailable and so for the any price level, the economy will be to produce less output then before.

So, in the short run, the market will move from A to point B.

Now the question is will the market correct itself.

Will we stay at this point B, or will we move to the hypothetical Long-run full employment output level.

And in this situation, it turns out that, well aggregate demand doesn't have any motive to change.

We have a given aggregate demand curve.

At least some shock happens to the demand side.

We could end up at this point B, as our Long-run equilibrium.

So, here because the change occur on supply side.

The supply side doesn't have any other reason to shift.

The demand side doesn't have any reason to shift.

So, because of this shock to the supply side, we could end up at a lower than an efficient output level.

And higher than efficient price level.

We could say that this, corresponds to stagflation.

Which is a situation, when there is a less than full amount of output.

We can talk about recession here.

And we have high inflation, we have higher than normal prices in the economy.

To move from this point, it turns out that we will need some government to intervention.

Remember that aggregate demand curve is a some of private consumption, investment, exports and government purchases.

So, if government wants to move from a this level of output to aggregate level of output.

One thing the government could do is a purchase more goods in the market place.

So, one policy to deal with the stock inflation, would be to increase government purchases, to shift aggregate demand curve to the right to move from short run equilibrium point B to a point C.

So this was a review chapter of a what happens at the aggregate level with the national output and with the price level.

That was a good summary chapter it brought together anything that we learned in the micro economic part of this course and many of the definition and variables that we studied in the micro economic part of this course.

And with this chapter in mind, we can understand the problems that the events that take place in the real economy and the problems that the government faces in choosing its policy.

So, this chapter summarize what happens at the aggregate level in the market place between the demand side and the supply side.

It summarizes the interaction between different kinds of consumers and the producers in the economy and the relationship between aggregate output and prices.

And this is a nice chapter that brings together everything that we studied in the micro economic part of the course.

I think it is a good wrapping up chapter different topics that we studied.

And a good chapter to make you think about micro economic events and the role of government in the market place.

When you read newspapers you hear about business cycle of recession, economic growth.

And this chapter lets you understand a little bit more.

How growth comes about, what is the role of government in it.

And what is the trade up relationship between prices and real economic variables,

So, that is the last chapter that we are covering this semester.

I hope that you have learned something interesting throughout the semester.

I hope you have enjoyed some of the topic that we covered.

I hope that you will not give up on the study of economics.

And perhaps I will see you one of a future classes dealing with a particular economic issues.

Best of luck on the final exam and have a good vacation