Microfoundations of Macroeconomics

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Course Summary

Welcome back so now this particular session is important because this is what we are going to discuss about what we are covered so far in this particular course. So when I introduce this course then I thought that it should give a different perspective on the macroeconomics especially unlike the conventional where we talk about ISLM model. This particular course should different than conventional macro economics. So with that set of mind I thought I should not be going much advanced maybe in future I will different course.

But in this course I thought that at least some feel about the micro foundation must be given and I hope by after attending all the I would say sessions you must be having a clear cut idea that how this course is different and you can compare with some other courses online. But here the idea behind this course is that with the help of different agents in the economy how we can draw the macroeconomic picture?

So in this particular course we started with the one period model and in one period model the idea was that how we can understand the behaviour of different agents in the economy. So considering that we do not have any it is very static period so you can say static models on the static setup. We try to understand the behaviour of the representative consumer then government then form and then we try to arrive at comparative equilibrium.

So there we introduce the $Y = C + G$ and then we solved it with the comparative equilibrium once we arrive at the comparative equilibrium then we wanted also to check that whether this comparative equilibrium is socially efficient or not. So for that purpose we utilize the concept of Parato optimality or welfare theorems. Then we introduce the Benevolent parameter which was the social planner. And then the social planner played a very important role.

We then moved to the 2 period models and in 2 period models what we try to understand was that how we can figure it out when you have the representative agent option to survive for 2 periods. So we have given only 2 periods to this agent this agent lives in period 1 and period 2 you get some amount of income saves amount of save some amount of income. In the current period but not in the future period because future period is a terminal period with certain dynamics compared to statics.

We try understanding that if the rate of interest is going to be higher if you have the current income future income increasing then how this particular individual is going to react. Then we introduce the concept of consumption function we then we had to explore a bit of dynamic optimization and then we also drive the Euler condition. We further focused on the role of these nuances that we derived in the consumption function.

So whether we can understand the consumption function Keynesian idea short run a long run so what was the derivation? We also derive the expression for the marginal probability to consume. After this we move to the credit market imperfections and credit market imperfections we started reading about what are the reasons behind the failure of the market? What are the reasons behind the failure of banks?

When you have credit market tightness how the banks and financial institutions react? So we started focusing on that part and then we introduced new concept. So I think some of you it must have been a new field that how we introduce the limited commitment? And how the collateral values started deciding about the borrowing capacity of the representative consumer.

And then we had the crisis situation where we divided the credit market into good borrower bad borrower you have the asymmetric information playing very important role, default premiums. All these terms we used in that then we moved to the government under government setup we introduced the concept of what we call it the Ricardian equivalence. In the Recardian equivalence the idea was that if you have the government which is playing very important role in facilitating the goods and services.

It also collects some taxes with the tax is going to have no savings whatever government is collecting if it going to spend as an if it going to use as an expenditure. Then how this particular government is going to play a important role in not just smoothening the consumption of the individuals. So how the individuals are also reacting with the decisions of the government?

So if the government is going to give you the tax cut in the current period. It does not means that it is going to give you in future also so there is no free lunch as tax in the economy. So individuals are also smart and they also save so smoothing of consumption is taking place very smoothly because of this understanding. So regarding equivalence idea gave and then we also looked at from where it is held holding and where it is not holding.

And then we move to a slightly different context where we introduce the role of the overlapping generation model where we had the 3 period models. In 3 period models we started looking at how the individuals are going to react when you have a one generation entering and then other generation passing. Then if you have a old and young then how the old is passing the Benevolence and some kind of question to the young.

So the young is having very easy way to pass it the shock to or the any kind of tax increase or any kind of shock I would arise in future smoothly. That was the purpose then we also introduced the related concept over about the social security programs under that we understood about the role of whether it should be pay as you go scheme. Or it should be mandatory so in pay as you go scheme as mentioned that it they covered.

Most of the time from the textbook that we; referred from the Williamson they covered that pay as you go seems reasonable. Because it depends upon the population growth if the young population growth is quite enough then the burden on the young is lower. And for old person it is also easier but in mandatory requirement we found that moral hazard and other factors play very important role.

We also then move to the monetary system under monetary system we focused on the inter temporal context that if you have a credit card apart from the conventional money that you have a debit card or even the cash or coin. Then if you have credit card then credit card provides you an opportunity because of the grade free days or the debt free days. That you do not have to pay any amount of interest so it is up to the individual to utilize that free interest free period to arbitrage whether you should go for cash or you should go for credit card.

So if the rate of interest the nominal rate of interest is higher than you can think about of the credit card because then if you have the cash in you hand then you can keep that money. In the bank and generate the return and once it matures once you have the last day of payment of your credit card you can withdraw that and whatever is the return that you can use it to pay off your credit card bills.

So in that intertemporal setup what we derive was the demand for money and that become quite obvious then we started moving into the neutratlity and non-equality of money. And we include the classical dichotomy concept that the money supply is directly linked with the price. But not all or it does not impact the real variables. So that argument we continued then we started having the idea about the rational expectation model.

And under that we introduced the concept of how we can form the expectation in the economy if you are having the macroeconomic picture. So what I mean to say that if you are having the idea about this model then you can find that in the policy making scenarios. How crucial are the factors about the expectations and further forward looking scenarios. Interestingly we also had a discussion on the schools of economic thought.

And then we discuss about the salt water, fresh water new I would say classical new keynesian which is salt water. And classical which is the fresh water and we started continuing on this line so under new keynesian classical neo-classical how the neutrality non neutrality sticky wages? Sticky prices play very important role and then we understood the idea behind certain new theories about.

For example we also worked on the menu cost we also worked on the complementaries. We also worked on the demand supply of money towards the end we focus on the financial crisis that how financial crisis play very important role. And with that we also introduce some new tools especially the Taylor rule that how the monetary policy should be designed. And once you have the monetary policy designing taking place.

Then we introduce the idea of what we have the forward guidance so forward guidance played very important role especially during COVID-19. So we examine that then we focus more on the relevance of the Taylor rule that whether we should focus one the output gap or inflation gap or it should be only the nominal interest rate. So, neo fisherian idea which people are in investigating these days and trying to propagate that the nominal interest rate.

Higher nominal interest rate will lead to higher inflation and it will not it will also break the economy from the debt trap. So zero lower bound scenarios we discussed so in this particular course we have also covered the conventional and non-conventional monetary policies. So zero lower bound we also consider the negative interest rate and the new keynesian setup.

So with this we towards the end as I mentioned that we focus on the financial crisis that how financial crisis should be talking about what it should be the role. In today’s session we focused or in the last session we focused more on the in terms of the trade context that how what should be the internal trade. Whether it should be talking about the how we can understand in the inter temple context in the 2 periods context about the trade in terms of trade concepts.

Whether we can add the dimension of the consumer government and then try to understand that what is the current account surplus how it looks like. How we can think about improving it so all these dimensions must have added a broad overview. To your understanding about the macroeconomics those of you who are not familiar with this particular type of topics then you can refer the Williamson book.

You can refer the Mishkin book that we have referred and whatever topics we have referred I have always cited mentioned. So you can always look at those references and go through it I am always available you can visit my personal website and write to me if you have any query I will be happy answer. I am thankful to all my TH my students those who have helped me in shaping the understanding about this particular concept.

While teaching in class we also learn a lot so through discussions it has helped a lot in understanding the theories. And I would always like to hear from you about your comments and suggestions about this course. Also if you have a suggestion about further about any topic you can always write to me. I am also thankful to the NPTEL team who had given immense support the team has given me the immense support in completing this course.

And at last thanks for the IIT Kanpur for giving me; this opportunity thank you so much for your time attention.