

Microfoundations of Macroeconomics
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Lecture – 19
Schools of Economic Thought

Welcome back. we are now going to start a new topic. We just now finished the topic on search and unemployment and we mention if you are trying to look at one period scenario then how individuals are facing opportunities and having some kind of uncertainty with regard to the job and how firms are participating. Now we are going to talk about I would say proper macroeconomics and deal with schools of economic thought.

And we will also have the understanding of the mainstream macroeconomics where we will have these jargons of Keynesians, Classical, New Classical, New Fisherian then in that scenario it becomes really important to have some brief idea about it. It may not be as comprehensive as you may find in some open sources or in the textbook, but given the time limit that I have, I will try to summarize the schools in macroeconomics. Where these schools of economic thought play an important role and in which all dimensions these schools of economic thought have contributed to macroeconomics.

What are the areas in which we can see the contribution of different macroeconomist? We will also try to understand how even the schools of macroeconomics are linked with the political economy. when we have different governments taking over then we also find that they will be based on certain political ideologies whether it be market-oriented or it is less market-oriented.

there are further orientations of the macroeconomic school thought towards that also. we will be trying to see since microeconomics is mostly in recent years the macroeconomic, school of economic thought is mostly based in the US and it will drive from there. you will find that most of the economists that we are mentioning they are US economists and they have mostly contributed to the different schools or different streams of macroeconomics. we will be talking about those things in detail.

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Rational expectations Punchlines

Reference Book

Author Name: **Ben J. Heijdra**
 Heijdra, B.J. (2017), Foundations of Modern Macroeconomics
 (3rd Edition). Oxford University Press

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the book remains the same, Ben. J. Heijdra book, I am referring the foundations of modern macroeconomics, Oxford University Press and this particular book is a nice reference to read about and briefly discusses about this schools of economic thought, but I have also referred some other materials, but major portion comes from this textbook.

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Rational expectations Punchlines

Schools in Macroeconomics

- **The classical economists:** Adam Smith, David Hume, David Ricardo, John Stuart Mill, Knut Wicksell, Irving Fisher.
 - Contributions: Strong belief on market and efficiency, market price mechanism, no government intervention, flexible wages, perfect foresight, neutrality of money, labour market clearing and no policy intervention.
- **Keynesians:** John Maynard Keynes
 - Contributions: Contrarian views on classicals. Strong believer in government intervention, limited role of monetary policy (liquidity trap), more emphasis on fiscal policy intervention etc.

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let us talk about the schools of macroeconomic. One we often mention is classical economist. Who are classical economists? classical economists are Adam Smith who is the father of economics, and we have David Hume then we have David Ricardo, John Stuart Mill then we have Knut Wicksell then we have the Irving Fisher all these are part of the classical school of economic thought.

Here the idea behind this particular school of economic thought can be linked with the open market economy or I would say the free market economy. Free market economy in the sense that there should not be any interference from the government, it should be completely the laissez-faire economy that we often mention.

So, in that the true value of or the price of each and every agent, each and every asset in the economy will be decided by the market depending upon the demand and supply scenario. There will not be any intervention and there should not be any market failure kind of scenario. They believed more in the market based economy and limited role of the government.

A famous law in this particular school of thought starts with the Say's law with the tagline that supply creates his own demand which means that if you are looking in the context of flexible prices, then it mentions how the demand and supply scenarios are helping these change in prices quickly. Whenever we see flexible prices, it means that it is decided by the demand and supply.

Supply creates its own demand in the sense that if the economy is looking for some kind of or it is trying to achieve some kind of long run equilibrium then whatever amount of investment that it makes to creates the capacity in the economy if we have enough income generation sources, flexibility in the wage rate, if the labour market clears based on the demand supply then there will not be deficiency of demand of goods and services.

Which means that there will not be excess supply in the economy. Now that idea was well accepted that time most of the economist in this particular school of economic thought they supported this, but later it was found that such ideas are not part of and you can say that even this particular school of economic thought mention about the perfect foresight, neutrality of money was one of the important concepts that if your monetary policy does not impact the real variables it just having the impact on the prices general level of prices.

Classical dichotomy is one area that also give lot of importance and it was part of a debate and discussion in the mainstream macroeconomics and one of the major contributions of the classical economists in the scenario of the macroeconomics is that they talk about more of a flexible ruling. Flexible ruling in the sense that talk about flexibility with regard to the prices.

Normally later when we have different developments in the macroeconomics then at that time people started arguing that whether there should be complete role of flexible prices, should flexible prices be there. If there is any kind of intervention, then how we can tackle so there are some issues with the welfare aspects. This particular school of economic thought believed strongly in the market based economy wherein the role of the market will be predominant in deciding about the fair prices of all the assets in the economy.

There will not be any interference. We will be talking when we discuss about the classical then even the new classical and new Keynesians then we will be coming back to these ideas again and then we will be focusing more on the flexible wages, flexible prices so those kind of ideas will come into picture again. During 1930s when we had slowed down at that time one more school of economic thought emerged.

And that school of economic thought about major I would say brought a change in understanding the macroeconomics because earlier people were having very limited say from the side of the government, but for the first time post 1930s when people has started losing jobs and there was need for intervention because when you leave everything to the market then it becomes really difficult especially those who are left out from this market mechanism they feel they do not feel being part of the economy.

As a result it creates some kind of disequilibrium and if disequilibrium persists for a longer period of time then it becomes really difficult to run the economy or control over the macroeconomic variables. So just to make sure at that time it was realized that there should be some intervention from the government or from different bodies. John Maynard Keynes at that time with whom the term we often attach is Keynesians.

Those who follow this idea or his ideas. So, John Maynard Keynes had given this idea that how we can think about making the economy better by not just pursuing the monetary policy or the market based economy, but we should also be understanding the role of the government how the government can play important role and can restore equilibrium if there is a disequilibrium created by the market.

But this was very short run analysis and in short run Keynes try to show that if you are going to just rely on the monetary policy then you are going to have the liquidity trap kind of

situations. It is better that you should always have the combinations and you should also give importance to the fiscal policy.

So fiscal policy mentions about the role of government expenditure, taxation then there will be debt financing so all these terms are attached. John Maynard Keynes for the first time he had gone for introducing such ideas and then he had mentioned about the dominance of the government intervention and how government intervention can create a multiplier effect in the economy.

But this was shorter analysis and even the consumption theories that the Keynesians schools of economic thought gave later it also became part of I would say macroeconomics. The Keynesian school of economic thought had a contrarian view against the classical.

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The slide is titled "Schools in Macroeconomics" and contains the following content:

- **The Neo-Keynesian synthesis also known as neoclassical:** Franco Modigliani, Paul Samuelson, James Tobin and Robert Solow
 - Contributions: combined the short-run and long-run features of Keynesian and Classical to develop their theories.
- **The Monetarists:** Milton Friedman and his friends
 - Contributions: Against fiscal stand and believed strongly on the role of money and monetary policy in the economy.

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Now you have the neo-Keynesian. So, in neo Keynesian what they do is that for short run, they combine the Keynesian school of economic thought. So, if you have a two items they you try to eat both. This became later when we had flourishing Keynesian school of economic thought.

And at that time some economist took the initiative, and they try to reconcile the differences between classical and the Keynesian by introducing or finding some commonalities between these two schools of economic thought. neo-Keynesian synthesis also known as neo classical under that they tried to derive the macroeconomic inferences using both short run which is Keynesian and long run which is the classical.

This particular school of economic thought is also important. So, under this school of economic thought the prominent names that we often take is the Franco Modigliani. Franco Modigliani is well known for the consumption theories and then the Samuelson, then we had the James Tobin is well known for the capital how the financing should be taking then we had the Robert Solow.

Solow is known for his contribution to the growth theory especially the long-term growth. All these economist they try to draw a common ground for both the understanding of macroeconomics from short run and long run perspective and one of the good thing is that the consumption aspect that they mention it has very good connect with the Keynesian and classical.

And even in terms of some of the concepts like understanding about the role of aggregate demand, aggregate supply in the economy, Neo Keynesian had a better perspective and they also added the dimension of micro to some extent and the flavor of micro started from here then we had the Monetarist. Monetarist is school of economic thought, a very special one because earlier monetary school of economic thought was part of the macroeconomic school of economic thought.

But later when we read about the monetary economics and we have a dedicated discipline on monetary aspect of the economy which we deal with the monetary economist then the Milton Friedman is given always the credit because he was the one who had gone for putting strong argument in favor of inflation as an monetary phenomena and he was in favor that if I am going to increase the money supply then it is bound to have positive impact on the inflation.

And that is why this positive relationship between money supply and inflation it has lot of macroeconomic implications on other macroeconomic variables and from here we had different schools attach with this then we had the equation of exchange and we had the Cambridge school of economic thought, all this school of economic thought they talk about more of how demand and supply play very important role in deciding about or in determining the general income and employment in the economy. Monetarist school of economic thought is well known about.
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Rational expectations
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Punchlines
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Schools in Macroeconomics

- **New Classical economists:** Robert Lucas, Thomas Sargent, Robert Barro, Edward Prescott.
- The New Classicals have often been associated with the **Saltwater** and **Freshwater** schools of macroeconomics. New Classicals are called Freshwater economists.
- Freshwater includes institutions located near the great lakes in the Mid West. For instance, University of Chicago, Carnegie Mellon University, Northwestern University, Cornell University, the University of Minnesota, and the University of Rochester.
 - Contributions: Freshwater believes in classical ideas of market based economy, role of rational expectation, flexible wages and prices, efficiency of markets and full employment.

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Then we have the new classical so in case of new classical which is the recent phenomena and most of the economists that we have. New classical have a lot of contributions in the field of macro because for the first time they started understanding the complex nature of the macroeconomics because in the beginning when macroeconomic started then people were dealing with the smaller instrument, less complexity in the model.

But when we have the diversified economy, different agents interacting with each other then it becomes really difficult to understand the complex characteristics of such economy. In that context it becomes easier to have a micro foundations or you can think about the general equilibrium models wherein we want to use different agents and try to understand the behavior.

Robert Lucas is known for or credited to bring more mathematical foundations to macroeconomics and he started with his argument of what we call the Lucas critic that how public sentiment should also be part of the public policy making otherwise if you are ignoring that then it may happen that you are simply shooting in the air and it may not be focused policy stand.

Thomas Sargent is also known for this the rational expectations hypothesis schools of economic thought that we have. Edward Prescott is known for the real business cycle school of economic thought not from the demand side, but from the supply side how productivity and all other factors play very important role. In one period model when we had discussed about what happened when we have increase in productivity.

When we are saying that when we have increase in productivity then it also deals with supply side of the economy. When you have better technology if you can produce more output in one day compared to what you are producing earlier. If I am going for that kind of technological advancement then that deals with the real business cycle school of economic thought because there you have the implications on macroeconomic.

From the changes that you are observing in the technological domain and also with regard to the labour productivity. Thomas Prescott is one, Barro is again one contributor in macro especially Barro is credited to bring the taxation especially the Ricardian equivalence concept that we have done. Barro is credited because when Ricardo gave this idea as a classical economist at that time he was not very aware of that whether the idea under Ricardian that the Ricardo assume that if a government is going to increase the tax that is not going to impact the consumption behavior of the representative agent because this representative agent will be able to smooth out the consumption.

And whatever amount that we have seen increase this will be increase in taxes it will have lesser impact on the future consumption. Consumption smoothing that we are seeing that if you have decrease in taxes in the current period, how this is going to impact the future period consumption that kind of allowances was introduced. Ricardo at that time when he had given this idea he had given up that this particular idea may not be suitable.

But later Barro introduced this particular idea Ricardian equivalence into analysis and then he found that the idea of intertemporal transfer of the wealth it is playing crucial role in understanding the taxation behavior of the government and how the consumption behavior also gets impacted. All these economists are credited one more schools of economic thought that is very recent name.

And you may find it online it mentions about the salt water and fresh water. The new classical are the freshwater economist. Freshwater economist belongs to those school of economic thought who support the classical idea that there should be flexible wages, flexible prices, there should be market-based economy.

There should be limited intervention of the government, so all these aspects are dealt with. Freshwater schools include institutions located near the great lakes, the Mid west. For example,

university of Chicago, Carnegie Mellon then you have the North Western university then you have Cornell, then you have Minnesota and then you have Rochester all these universities are credited to bring fresh water school of economic thought.

And fresh water are involved in the agent based modeling for that you require sophisticated mathematical skill. I would say freshwater school of economic thought is credited to bring more mathematics into economics and nowadays economics has become a sub stream of I would say mathematics because there you have lot of applications.

And a lot of mathematicians are interested in becoming economist because they find it quite easier to connect with their understanding of different methods, rules and thoughts and that is why we find that in these days if you read the main stream research paper even in journal it becomes difficult to understand because if you do not have the sufficient mathematical skills then it is really difficult to understand.

Fresh water includes the institutions located near the great lakes of in the mid-west. These are the institutions located, but among these institutions University of Chicago had dominance for very long time and it has also influenced the fed policies to a great extent and when I am saying about the influence, influence about the fed policies in monetary policy making.

They are also dominant in the government. Fresh water basically talks about the free market economy let us keep it simple. Fresh water belongs to free market economy where everything is decided by the market, no intervention from the government.

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Rational expectations Principles

Schools in Macroeconomics

- **New Keynesian economists:** George Akerlof, Edmund Phelps, John. B. Taylor, Stanley Fischer, Oliver-Jean Blanchard and Greg Mankiw.
- They are called as **Saltwater** economists.
- Universities located near the East and West coasts: University of California, Berkeley, Brown University, Dartmouth College, Harvard University, University of Pennsylvania, Princeton University, Columbia University, and Yale University.
 - Contributions: Their theoretical nuances are based on Keynesian ideas. Believe in the role of nominal rigidities, strong role of govt. intervention, coordination failures, imperfect competition etc.

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Then here we have the salt water in salt water you have the new Keynesian economists coming. George Akerlof then you have the Phelps then here you have the Taylor rule which is very popular in macroeconomics then you have the Stanley Fischer who is credited to contribute to the monetary policy aspect then here you have the Blanchard macroeconomist, Gregory Mankiw you must be knowing the macroeconomic textbook of Gregory Mankiw is very popular.

So new Keynesians schools of economic thought believe in the dominance of the government. Free market economy is ruled out so they are against the free market economy you can say which all the university located near the East and West Coast. university of California, Berkeley, Brown university Dartmouth then here you have the Harvard then you have the Pennsylvania.

Then you have the Princeton, then you have Columbia, Yale all are the salt water economist. Salt water in the sense that they belong to the Keynesian school of economic thoughts where there will be role of the fiscal policy, government should intervene through taxation, through certain policies, government can participate in the market. This is what they mention about.

Their theoretical nuances are based on the Keynesian idea, so this is how they mentioned about. Theoretical ideas in the sense that they focus more on the aspects that we deal with the government policies and that is why it is very much known then one more term as compared to the classical the Keynesian school of economic thought adds to what is called nominal rigidities.

What is meant by nominal rigidities? Nominal rigidities are those which means that if you do not allow the market to decide about the equilibrium. If the free market equilibrium is not taking place for example either the flexible wages, flexible prices if these things are not. One of the term that we often use in this aspect is called the menu cost which means that if you have a price decrease or price increase of a particular asset you do not see immediate adjustment it takes time.

One example which is commonly given is that when you have the price increase if your inflation is rising then we do not see immediate increase in the prices of the restaurant food items it takes time and then I would say that so there will be staggered price change it may not be immediate, but in case of classical if you are going to participate and if the market is going to play important role then we find that the there will be role of the market policies which means that the agents will be playing important role.

And the price will be decided based on the demand supply. The strong role of the government interventions, coordination failures that if we have the monetary policy decided by the government then how different agents can play some agents may have better information some agents may have limited information. That coordination we are talking about and it has direct bearing on the business cycle.

Imperfect competition which means that now more or less it is dealing with the dominance of the government or interference of the government.

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Rational expectations Punchlines

Schools in Macroeconomics

- **Fresh Water vs Salt Water:** Hall (1976) observed the influence on federal US economic policy-making of "freshwater economists", who were largely affiliated with the University of Chicago and other schools clustered near the Great Lakes, including the University of Minnesota and the University of Rochester
- **Fresh Water** economics is typically caricatured as heavily reliant on mathematics and concerned only with its own internal consistency rather than empirical validity.

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Now freshwater school and saltwater school the Hall 1976 mentions about how the fresh water school was dominant for a very long time, University of Chicago mostly located near the great lakes were quite dominant. Similarly, the fresh water they are mostly reliant on the mathematics I have already mentioned.

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Rational expectations Punchlines

Schools in Macroeconomics

- One of the most fundamental assumptions dividing fresh and saltwater thinkers is the rational-expectations model of human behaviour. Whereas freshwater thinking is generally underpinned by an assumption that the rational-expectations model broadly holds, saltwater scholarship is more concerned with anomalies in the theory.
- The divide between the two schools is also rooted in clear differences in **political ideology**. While freshwater economists have greater faith in the ability of free markets to function well, saltwater economists are more supportive of government intervention.

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Now, if you think about political ideology that how political ideology matters then in that context the salt water and fresh water school of economic thoughts becomes important if you have the market oriented policies taking place in the economy, if you have more focus on the corporate sector development, we have less role of the government. Mostly the right inclined political parties when they come to power.

So in case of US you may find that when you have the democrats ruling then you find that you have the salt water taking over. If you have the republicans coming then we find that you have the more dominance of the fresh water during 1960s it was very dominant schools of these two schools were very dominant even the institutions were not allowed to interact with each other.

But over a period of time we found that the differences have been normalized and we see that the fresh water school of economic thought of interacts with the salt water and now we have more coordination, but even in terms of political ideology we find that there are some differences. This is what I wanted to mention. I hope this lecture has helped you to understand this session has helped you to understand different schools of economic thoughts.

Let me summarize what we have discussed. So, we started with the classical, classical means that everything is free and it is decided by the market. Free in the sense that it is decided by the market and less role of the government.

Then we have the Keynesian. Keynesian focus on the role of the government because then they emphasize that apart from monetary policy we should be focusing on the fiscal policy also then here we have the neo classical and neo Keynesians which we are talking more in the combination with the Keynesians and classical. They are known as neo classical and neo Keynesian, but the underlying idea is that these two schools of economic thought they wanted to have the long run and short run analysis.

Short run deals with the Keynesian, long run with the classical then we have the monetarist school of economic thought. Monetarists talk about more of the role of the money in the economy and how the monetary policy can act as an important tool to control on all the macroeconomic indicators. Milton Friedman is dedicated further then we have the new classical they added the dimension of micro foundation that we are trying to cover.

And to some extent it also comes from the new classical. new classical have gone for expanding the idea and they further out the new developments into the macroeconomic. long run theory is mostly you deal with growth and development we find that the new classical has played very important role then we had the new Keynesian and new classical school of economic thought is also linked with the freshwater.

And then we had the neo Keynesian under that we had the Mankiw and we had the Blanchard and some more economist talking about. new classical and new Keynesians are linked with the fresh water and salt water and salt water basically the role of the government they emphasize more on the role of the government, fresh water emphasize more on the market. I am stopping it here I hope this particular session was very useful to all of you.

And you can explore further about these things because given the limited time it is difficult to cover each and every aspect, but you should read and the reference that I have mentioned you can refer and understand those schools in a much better way. I hope this will give you sufficient platform or give you sufficient background about understanding the new Keynesian and new classical synthesis that we will be talking in the later session. I hope it has been useful and thank you so much for your time.