

New Keynesian Macroeconomics (NKM)

Economics Honours (4th Sem)

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New Keynesian economics is the school of thought in modern macroeconomics that came from the ideas of **John Maynard Keynes**. Keynes wrote the **General theory of employment interest and money** in the 1930 and his influence among academic and policymakers increased through the 1960 and in the 1970.

The New Keynesian describes those economist who in the 1980s respond to this new classical critique with adjustment to the original .The primary disagreement between new classical and new Keynesian economist is over how quickly wages and prices adjust .New classical economists build their macroeconomic theory on the assumption that wages and prices of flexible .They believe that prices clear market and balance supply and demand by adjusting quickly. New Keynesian economics however believe that market clearing models cannot explain short run economic fluctuations and so they advocate models with sticky wages and prices. New Keynesian theory is rely on the stickiness of wages and prices to explain why involuntary unemployment exists and why monetary policy has such a strong influence on the economy.

The Keynesian model emphasize on involuntary unemployment and the role of aggregate demand in determining output and employment. A key element of these models is wage rigidity in recent years; economists working within Keynesian tradition have pursued additional explanations of involuntary unemployment. The models emerging from this research are called **New Keynesian Macroeconomic Models**. Main contributors are **N. Gregory Mankiw** and **David Romer**. Main focus of the above-mentioned two economists along with other advocates of New Keynesian Macroeconomics (NKM) is that the Keynesian macroeconomic model lacks a solid microeconomic foundation and these economists have tried to incorporate this microeconomic foundation in the Keynesian system. These economists have argued that as wage and price rigidities are central to explain Keynesian theory of involuntary unemployment, there must be some microeconomic foundation which explains that these rigidities arise from the behaviour of optimizing agents.

In NKM some form of **imperfect competition** is assumed for the product market. The traditional Keynesian models assume **perfect competition**. Traditional Keynesian models focus on **rigidity of nominal wage** whereas NKM focus on **nominal wage rigidity as well as on product price rigidity**. Unlike traditional Keynesian models NKM also focuses on rigidity of real wage or firm's relative price rigidity in the face of changes in aggregate demand.

We consider here three types of NKM models:

1. Sticky price (menu cost) models
2. Efficiency wage models
3. Rigidities in interest rates and credit rationing

Mankiw Sticky Prices Model: Menu Costs

The proponents of the menu cost hypothesis describe the situation with several cost assumptions.

The different types of costs are :

Managerial Costs: It implies the cost of gathering the information required to decide on the optimal price change and also the cost of communicating to customers to explain the logic of such change.

Potential cost of consumer goodwill: Consumer goodwill is generally lost at the time of price increase rather than price decrease. But when firms cut prices at the time of recession they must raise them at the time of recoveries.

Price war: Perceived cost of price reduction is that it may set off competitive rounds of price cuts or even lead to a price war as other firms respond. The potential cost is most relevant for oligopolistic markets, where firms have knowledge about other firm's reactions to their pricing decisions.)

A crucial element of NKM sticky price models is that the firm must not be a price taker under perfect competition as under perfect competition the firms have no power over the product price. The demand schedules they face are horizontal straight lines. If we consider the case of a particular firm under perfect competition we find that the market price is determined by interaction of market demand and market supply and at this market price the firm can sell any amount it wants so that for the particular firm the demand curve is horizontal. Suppose there is a fall in aggregate demand so that the market demand curve shifts to the left. It implies that there is also a fall in market price. If in the face of a fall in demand the perfectly competitive firm maintains its original product price, it would not be able to sell any output. There is thus no room for sticky prices under perfect competition.

New classical macroeconomic theories are based on the assumption of flexibility of prices where prices clear markets by adjusting demand and supply quickly. New Keynesian economists, on the other hand, believe in the stickiness of prices in the short-run.

Markets do not clear quickly because adjusting prices is costly. Frequently adjusting prices of their goods involve costs to firms. A large sector of the economy is made up of price-makers who sell goods in monopolistic or imperfectly competitive markets. For them, adjusting prices is costly.

Assumptions:

The costs of adjusting prices are called the **Menu costs**.

The sticky nominal price analysis of menu costs is based on the following assumptions:

1. There is an imperfectly competitive market which consists of a number of monopolistic competitive firms.
2. Firms produce standardized or differentiated products.
3. Firms are price-makers having some control over the prices of their products.

4. Price adjustments involve costs for firms.

5. The demand curves are linear.

6. The marginal cost curve is horizontal.

Changing prices requires the use of resources by a firm. It has to print new price lists (menus), catalogues, and other printed material. A super market has to relabel all products and shelves with the new prices. A hotel and a restaurant have to reprint its menu with new prices. Meetings, phone calls, and trips by representatives of a firm to renegotiate with suppliers, all fall under the category of menu costs.

In the menu costs approach to sticky prices, it is profitable for firms to react to small changes in demand by keeping prices constant over a short period and responding with changes in output. Because of menu costs, firms do not change their prices every time with a change in demand conditions. Menu costs are incurred each time prices are changed periodically rather than continuously. Thus menu costs explain the short-run stickiness of prices.

In the menu cost hypothesis, prices adjust slowly because changes in prices have externalities. When one firm reduces the price of a product, it benefits other firms in the economy. When it reduces the prices it charges, it lowers the average price level slightly and thereby raises real income. The increase in real income, in turn, raises the demand for the products of all firms.

This macroeconomic impact of one firm's price adjustment on the demand for the products of all other firms is called an **aggregate-demand externality** by Mankiw. With aggregate demand externality, small menu costs can make prices sticky.

Criticisms:

The menu costs approach has been criticised on the following grounds:

1. The menu costs approach is defective in that it considers only costs of price adjustment and not costs of output adjustment.

2. This approach assumes that marginal cost moves in proportion with demand. As demand rises or falls, marginal cost also increases or declines in the same proportion. In fact, no firm can assume that its marginal cost will be perfectly correlated with its aggregate demand.

3. This hypothesis tries to explain nominal rigidities in adjustments of the level of prices. But it fails to explain rigidities in adjustments of the rate of change of prices.

4. Critics point out that menu costs are small and have become smaller as computers allow the printing of menus at a small marginal cost.

5. Economists do not agree that menu costs can explain price stickiness in the short run because they are very small. Small menu costs cannot explain recession in the economy.

6. Another flaw is that small menu costs may be important for an individual firm but they are unlikely to affect the economy as a whole.

New synthesis during 1990:

The debate between New classical and New Keynesian economist lead to the emergence of new synthesis among macroeconomist about the best way to explain short run economic fluctuations and the role of monetary and fiscal policies. The new synthesis attempts to merge the strengths of the competing approaches that preceded it. From the new classical model it takes a variety of modeling tools that shed light on how household and firm can make decisions over time. From Keynesian models it takes price rigidities and uses them to explain why monetary policy affects employment and production in the short run .The most common approach is to assume monopolistically competitive firms (firms that have market power but compete with other firms) that change prices not steadily. The heart of the new synthesis is that the economy is a dynamic equilibrium system that deviates from an efficient allocation of resources in the short run because of sticky prices and perhaps for market imperfection in many ways. This new synthesis forms the intellectual foundation for the analysis of monetary policy at the Federal Reserve and others central bank around the world.