

Neo-classical economists do not accept the difference between the short-run and long-run results in the Keynesian or Monetarist analysis of the effects of aggregate demand on output and employment. The focal point of their criticism is the Keynesian (and monetarist) assumption concerning price expectations. They assume that labour suppliers form an expectation of the current aggregate price level or inflation rate on the basis of the past behaviour of prices. In practice, Keynesians and monetarists have assumed that such price expectations adjust slowly and can be fixed for the analysis of policy effects over short periods.



Saturday

Neo Classical economists criticize

such formulations of expectations as naive in the extreme. Why, they ask, would rational people forming an expectation of the price level rely only on past values of the price level?

Neo classical economists propose that economic agents will form rational expectations, rational in that they will not make systematic errors. According to the hypothesis of rational expectations, expectations are formed on the basis of all available relevant information concerning the variable being predicted. Furthermore, the hypothesis mentions that individuals use available information

in the
 obs
 tries
 in f
 agg
 use
 inf
 on
 the
 the
 lev
 of
 lab
 on
 they
 both
 the
 the
 nat
 mo
 The
 leve
 the
 hy
 as
 th

intelligently; that is, they understand the way in which the variables they observe will affect the variable they are trying to predict.

If expectations are rational, then in forming a prediction of the value of the aggregate price level, labour suppliers will use all relevant past information, not just information about past behaviour of prices. In addition, they will use any information they have about the current values of variables that play a role in determining the price level. Most important from the standpoint

of aggregate demand management policy, labour suppliers will take account of any anticipated (expected) policy actions. Further,

Monday

18

they are assumed to understand the relationship between such policies and the price level.

A useful contrast can be made between the backward-looking nature of expectations in the Keynesian model and the forward-looking nature of rational expectations. In the Keynesian model, expectations are backward looking. The expectation of a variable such as the price level adjusts (slowly) to the past behaviour of the variable. According to the rational expectations hypothesis, economic agents instead use all available relevant information and intelligently assess the implication of that information for the future behaviour of a variable.

February 2019

19

Tuesday

(3)

2019

JANUARY

S	M	T	W	T	F	S
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

If labour suppliers make forward-looking rational forecasts of the price level, then the preceding analysis must be modified. To see this modification, we analyse the effects of an increase expansionary policy action: a one-time increase in the money supply. To analyse this change with the assumption that expectations are rational, we must begin by specifying whether the policy change was anticipated. Anticipated and unanticipated policy changes have very different effects when expectations are assumed to be rational.

First, we assume that the policy change is anticipated. For example, we assume that the policy maker systematically responds to an increase in unemployment in one period

20

Wednesday

by increasing the money supply in the next period (to counter unemployment), the public will come to anticipate an increase in the money supply for period t when they observe an increase in the unemployment rate of period $t-1$.

We begin to consider the characterization of equilibrium output and employment in the new classical analysis, as illustrated in Fig 3. The crucial difference between the new classical case and the Keynesian case concerns the variables that determine the position of the labour supply and aggregate supply schedules. As in Keynesian theory, we assume

S	M	T	W	T	F	S
31					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30

(4)

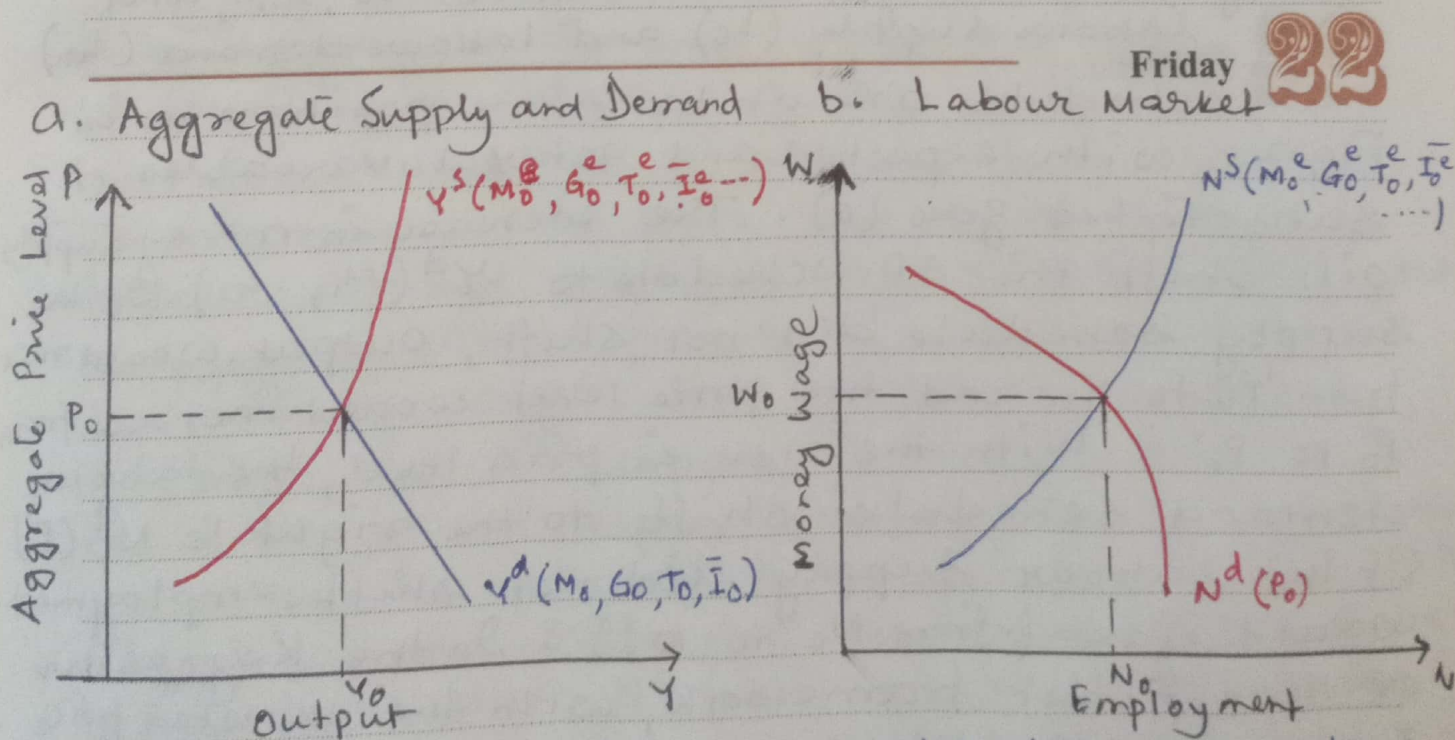
that the labour supply depends on the expected real wage, the known money wage divided by the expected price level:

$$N^S = t \left(\frac{W}{p^e} \right) \dots (5)$$

Consequently, the position of the labour supply schedule, and therefore the aggregate supply (AS) schedule, depends on the expected price level. Increases in the expected price level will shift both schedules to the left.

Fig 3

Output and Employment in the New Classical Model



Friday

22

In the new classical model, the aggregate supply schedules depend on the rationally formed expectations of current variables including monetary and fiscal policy variables (M_0^e, G_0^e, T_0^e)

In the new classical model, with the assumption of rational expectations, the expected price level depends on the expected levels of these variables. These include expected levels of money supply (M^e), government spending (G^e) and tax collections (T^e), autonomous investment (I^e) and possibly other variables. It is also noted here that the positions of the labour supply and aggregate supply schedule depend on the expected levels of policy variables (M^e , G^e , T^e).

Consider the effect of a fully anticipated increase in the money from M_0 to M_1 , as depicted in Fig 4. Initially, assume that AD, AS, and labour supply (L_s) and labour demand (L_d) schedules are at the same positions as in Fig 3, with expected and actual variables subscripted zero (0). The increase in money supply will shift the AD schedule to $Y^d(M_1, \dots)$. If the supply schedule did not shift, output would rise from Y_0 to Y_1 and the price level would increase from P_0 to P_1 . With the rise in price level, the labour demand schedule shifts to the right to $N^d(P_1)$. If the labour supply did not shift, employment would rise (from N_0 to N_1). In the Keynesian or monetarist framework, with the expected price level unrelated to the current level of policy variables, the positions of the AS and L_s would be fixed in the short run, and our analysis would be complete.

24

Sunday

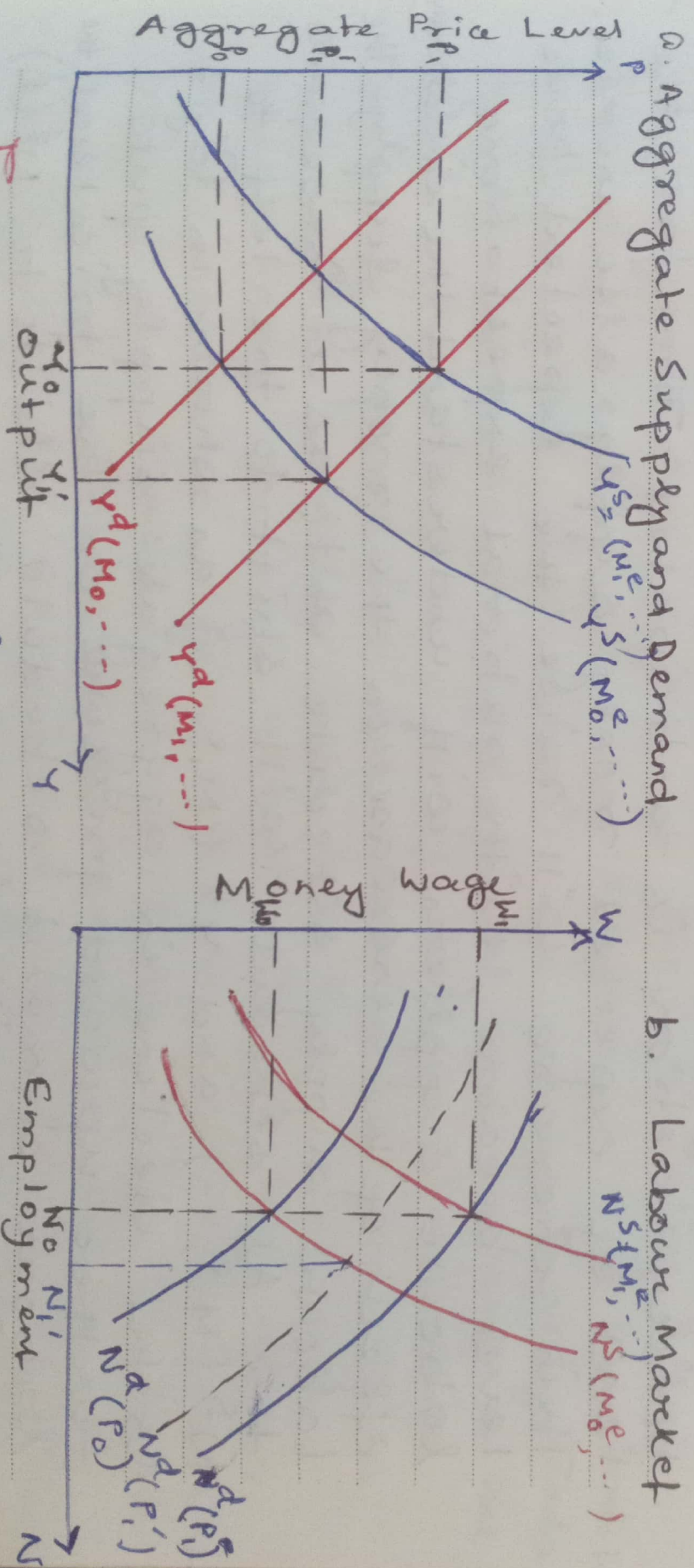
2019		MARCH						
S	M	T	W	T	F	S		
31					1	2		
3	4	5	6	7	8	9		
10	11	12	13	14	15	16		
17	18	19	20	21	22	23		
24	25	26	27	28	29	30		

February 2019

Monday

Effects of an increase in the money supply

The New classical view



The increase in the money supply shifts the aggregate demand schedule from

are not fixed in the short run. The expansionary policy action is anticipated. Therefore, the level of expected money supply also increases. This increase will raise the expected price level because, with rational expectations, labour suppliers will understand the inflationary effect of the increase in the money supply. The labour supply schedule and, as a consequence, the AS schedule will shift to the left to $N^S(M_1^e, \dots)$ and $Y^S(M_1^e, \dots)$ as shown in Fig. 4. As the decline in aggregate supply puts further upward pressure on the price level, the labour demand schedule shifts to $N^d(P_1)$. The new equilibrium is where output and employment have returned to their initial levels, Y_0 , N_0 , while the price level and money wage rate are permanently higher at P_1 and W_1 , respectively. It is to be noted that the return to the initial levels of output and employment takes place in the short run when expectations are rational.

The new classical analysis differs from either a Keynesian or a Monetarist analysis in that labour suppliers are assumed to perceive correctly the price increase that will result from the increase in the money supply. They will demand proportionately higher money wages. The labour market will return to equilibrium only after the money wage and price level have increased in the same proportion, the real wage

2019

APRIL

S	M	T	W	T	F	S
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30				

(8)

March 2019

Friday

1

is unchanged, and consequently employment and output are back at their initial levels.

Put differently, in the Keynesian and Monetarist analysis, the increase in the money supply leads to an increase in employment and output in the short run — that is, until labour suppliers correctly perceive the increase in the price level that results from the expansionary monetary policy action. In the Keynesian or monetarist view, because expectations about prices are backward looking, this short-run period in which the increase in the money supply affects output and employment can be of considerable length. If expectations are rational, forward-looking labour suppliers cannot be systematically fooled by anticipated changes in aggregate demand policy.

Saturday

2

If expectations are found rational anticipated aggregate demand policy actions will not affect real output or employment, even in the short-run. The values of real variables such as output and employment will be insensitive to systematic changes in aggregate demand management policies.

Thus far, we have been assuming that the increase in the money supply was anticipated either because it was announced or because it was a systematic policy response that could be predicted. Now, consider the effects of an unanticipated

S	M	T	W	T	F	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28		



Sunday

(9)

increase in aggregate demand. Again we consider the effects of an ~~unanticipated~~ increase in the money supply from M_0 to M_1 . The short-run effects of this unanticipated increase in aggregate demand the money supply (monetary surprise) can be explained with the help of Fig 4. As before, the increase in M_s shifts AD schedule from $y^d(M_0, \dots)$ to $y^d(M_1, \dots)$. As the price level rises to P_1 , the labour demand schedule also shifts to the right, to $N^d(P_1)$. If the increase in the money supply is unanticipated, these are the only schedules that shift in the short run. The additional leftward shifts of L_s and AS

4

Monday

in Fig 4 do not occur for an unanticipated increase in money supply. When the increase in the money supply is not anticipated, it does not affect the labour suppliers' expectation of the value of the aggregate price level will take on over the current period, so the labour supply schedule does not shift.

When the increase in money supply is unanticipated, the new classical model indicates that output and employment will be affected. In Fig 4, output will rise from y_0 to y_1 and employment will increase from N_0 to N_1 , results identical to those of Keynesian and Monetarist model. For the short run, even assuming rational expectations labour suppliers do not perceive the inflationary effect of the

2019

APRIL

S	M	T	W	T	F	S
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30				

(10)

March 2019

Tuesday



increase in aggregate demand. This was the assumptions in both the Keynesian and monetarist views for any change in AD.

New classical economists deny that anticipated changes in aggregate demand can affect output and employment, but their view of the effects of unanticipated changes in aggregate demand does not differ from that of Keynesians and monetarists.

This analysis of the effects of an unanticipated monetary policy action illustrates an important difference between the new classical theory and the classical theory.

In the new classical model, economic agents form rational expectations, but they do not

Wednesday



have perfect information; they make mistakes in predicting the price level, and such mistakes cause short-run deviations of output and employment from their long-run equilibrium rates. In the classical model, economic agents were assumed to have perfect information. Labour suppliers knew the real wage; there were no monetary (or other) surprises and no deviations from the supply-determined rates of output and employment.

S	M	T	W	T	F	S
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28		

The new classical view that unanticipated aggregate demand changes affect output and employment still does not provide a meaningful role for macroeconomic stabilisation policy. To see this, consider the new classical economists' view of the proper policy response to a decline in private-sector demand - for ex, an autonomous decline in investment. The effects of the decline in investment is depicted in figs. The decline in investment demand shifts the aggregate demand schedule from $Y^d(I_0)$ to $Y^d(I_1)$ in fig 5a. This shift causes output to decline from Y_0 to Y_1 . The price level will fall from P_0 to P_1 , and as a result, the labour demand schedule in fig 5b will shift downward from $N^d(P_0)$ to $N^d(P_1)$.

Friday

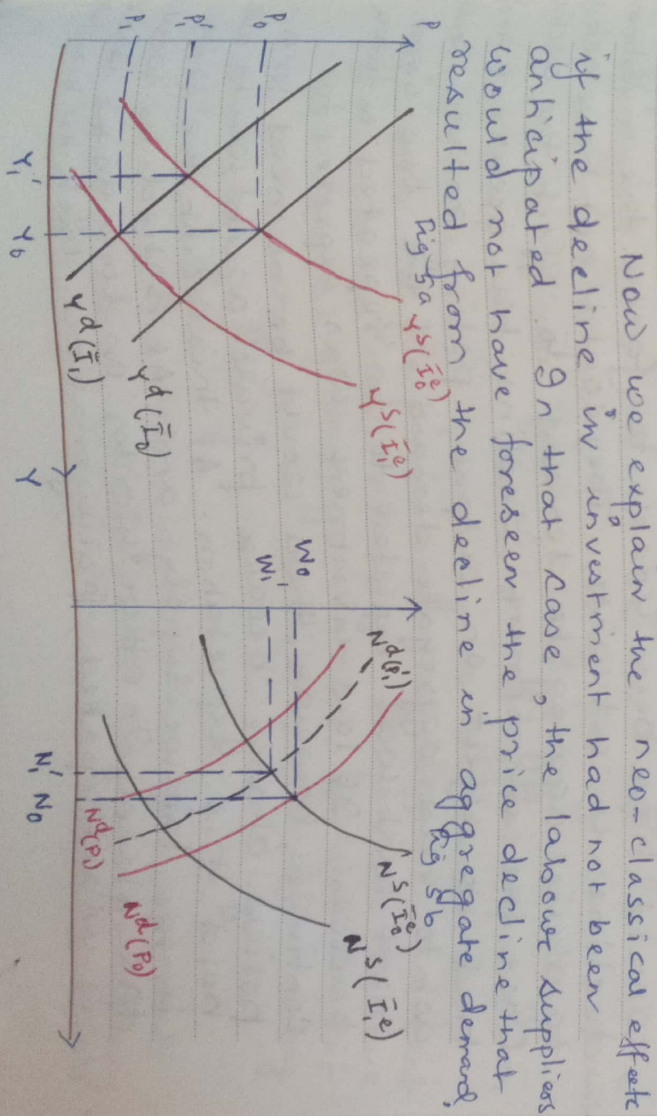
Whether there are additional effects depends on whether the decline of investment was anticipated or unanticipated. To begin, we assume that it was anticipated.

On that case, labour suppliers will anticipate the decline in the price that will result from the decline in aggregate demand. Labour suppliers, now expecting the price level to be lower, will supply more labour at a given money wage rate. Because with the lower expected price level, the expected real wage rate increases the fall in expected price level shifts the labour supply schedule shifts to the right in fig 5b [from $N^s(I_0)$ to $N^s(I_1)$]. As a consequence, the aggregate supply schedule shifts to the right

in Fig 5A [from $y^s(\bar{I}_e)$ to $y^s(\bar{I}_e)$]. There is a further decline in the price level to P_1 and therefore a further downward shift in the labour demand schedule to $N^d(P_1)$. At the new short-run equilibrium, the money wage and price level have fallen sufficiently to restore employment and output to their initial levels, N_0 and Y_0 .

This analysis is just the reverse of our analysis of an anticipated increase in aggregate demand resulting from an increase in the money supply. In the new classical system, output and employment are not affected by anticipated changes in aggregate demand, even in the short-run. Consequently, there is no need for a stabilisation policy response to an anticipated demand increase such as a decline in investment.

Sunday



March 2019

11

Monday

(13)

2019 FEBRUARY

S	M	T	W	T	F	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28		

The labour supply schedule (5b) and the aggregate supply schedule (5a) would have remained at $N^s(I_0^s)$ and $Y^s(I_0^s)$, respectively. The decline in investment would have caused output and unemployment to decline to the levels given by Y_1 and N_1 . The question is that whether there would be an offsetting policy action to raise aggregate demand back to its initial level.

The answer is that such a policy response would be desirable but not feasible. The decline in investment was by definition unanticipated. That is, assuming rational expectations, the decline could not have been predicted on the basis of any available information.

12

Tuesday

Policy makers, like other economic agents, would have been unable to foresee the investment decline in advance. They could not have acted to raise aggregate demand to offset the decline. Once the investment decline has occurred and had its effect on output, policy makers could act to raise aggregate demand if the low investment level was expected to be repeated in future periods. If low investment was expected to continue, however, there would be no need for a policy change because private agents would also hold this expectation. At this point, the shift in the labour supply and AS schedules would take place. In other words, as long as the shock is unanticipated, policy makers lack the knowledge

needed to offset the shock. Once the shock is anticipated by policy makers, it is also anticipated by other economic agents, including labour suppliers, and there is no need to offset the shock.

In the case of fiscal policy, new classical economists favour stability and the avoidance of excessive and inflationary stimuli. New classical economists Thomas Sargent and Neil Wallace were critical of the large deficits that resulted from the Reagan administration's fiscal policy of the 1980s.

Instability in fiscal policy causes uncertainty, making it difficult for agents forming rational expectations to correctly anticipate the course of the economy. Moreover, Sargent and others believe that a credible non-inflationary monetary policy cannot coexist with a fiscal policy that generates large deficits. Huge deficits put great pressure on the monetary authority to increase money growth to help finance the deficit. Sargent and other new classical economists believe that control of the government budget deficit is necessary for a credible, non-inflationary monetary policy.

CONCLUSION:

The new classical economics presents a fundamental challenge to Keynesian orthodoxy. On the theoretical level, new classical economists

March 2019

15

Friday

(15)

2019 FEBRUARY						
S	M	T	W	T	F	S
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28		

question the soundness of the Keynesian model. They argue that many of its relationships are not firmly based on individual optimizing behaviour. New Classical economists point to the naïve treatment of price expectations in the Keynesian model as an example. Further, they criticize what they consider Keynesians' arbitrary assumptions concerning wage stickiness and consequent involuntary unemployment.

On the policy questions, New Classical economists mention that output and employment are independent of systematic and anticipated changes in aggregate demand. In this regard they arrive at noninterventionist policy conclusions similar to those of the classical economists.

16

Saturday

Keynes criticizes the neo-classical theory on several grounds. They argue that the new classical model cannot explain the prolonged and severe unemployment experienced by the United States and other industrialised countries. They claim that the rational expectation assumption ascribes an extreme and unrealistic availability of information to market participants. Finally, and most important, they criticize the auction market characterisation of the labour market in the new classical model. Keynesians believe that the labour market is a contractual market and the nature of these contractual arrangements leads to wage rigidities and consequent

involuntary unemployment.

The financial crisis and deep depression of 2007-09 renewed interest in the central issues in the debate between Keynesian and new Classical economists. Several questions are floating around: Can the new classical model realistically account for severe prolonged output declines? Do aggregate demand management policies provide a remedy for severe recession? Keynesian critics used the events of 2007-09 to accuse new classical economists of "making ancient and basic analytical errors all over the place" and of "making truly boneheaded arguments." Robert Lucas praised the Federal Reserve for reacting to the financial crisis by injecting large amounts of cash into the banking system, but this was mending the market mechanism rather than simply boosting aggregate demand.

Monday

18

March 2019

Tuesday

Relevant Questions of New Classical Model

2019 FEBRUARY						
S	M	T	W	T	F	S
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28		

1. Explain the concept of rational expectations. How does this view of rational expectations differ from the assumption that workers form their expectations of current and future price levels based on past information about prices?

2. Explain in what sense the Keynesian view of price expectations is considered naïve by the New classical economists.

3. Explain the major criticisms of the New classical Economists against the Keynesian orthodoxy.

4. Explain the views of the Keynesians on rational expectations formulation and its implications on the effectiveness of stabilisation policy.

5. Compare the new classical and monetarist positions concerning the effectiveness of aggregate demand management policies to stabilise output.

6. Even within the new classical model, anticipated policy actions such as an increase in the money supply will affect nominal income. Explain why the adjustment of economic agents' expectations, which offsets the real effects of such a policy change, does not offset the nominal effects as well.

7. In what ways new classical theories are

2019							APRIL						
S	M	T	W	T	F	S	S	M	T	W	T	F	S
1	2	3	4	5	6	7	8	9	10	11	12	13	14
15	16	17	18	19	20	21	22	23	24	25	26	27	28
29	30												

(18)

March 2019

Thursday

21

different with classical theories?

8. Explain the effects of anticipated and unanticipated change in money supply in neo-classical framework.