Explain how equilibrium is detemined in the keynesian income expenditure model. u...

In the Keynesian income-expenditure model, alternatively known as the simple Keynesian one sector model, equilibrium is determined through the equality between aggregate demand and the aggregate supply. Since, the model was developed to illustrate the situation of the American economy during the Great depression the framework is set up assuming an advanced capitalist economy undergoing depression. There is sufficient unused capacity such that if there is a rise in real aggregate demand, real output and employment expand. Wages, prices and rate of interests thus are assumed to be fixed. Given this rigidity of wages and prices, equilibrium output therefore is determined by demand.

The aggregate effective demand is composed of planned real aggregate consumption expenditure (C), planned real aggregate investment (I) and real aggregate government expenditure (G). Real aggregate consumption expenditure is assumed to be a function of real aggregate output (Y) such that if Y rises C also rises but less than proportionally.

In the simple Keynesian model G and I are assumed to be fixed at some arbitrary levels, G0 and I0 (say).

Thus, real effective aggregate demand = C(Y) + G0 + I0

The equilibrium condition therefore becomes

C(Y) + G0 + I0 = Y

The equilibrium is attained at that level of income or real output, equal to the effective demand. In the diagram above, the effective demand curve (obtained by vertically summing up C(Y), I and G) intersects the 45 degree line for the level of real aggregate output Y*. Thus Y* is the level of real aggregate output that satisfies the demand supply equality. The intersection

point between the effective demand curve and the 45 degree line is referred to as the Keynesian cross.

Now if there is a decline in government spending (G) given everything else remains unchanged, the effective aggregate demand will fall for each level of real output. Suppose G falls from G0 to G1. Therefore, the effective demand curve will shift downwards. Therefore the newer intersection point with the 45 degree line shall be to the left of the initial equilibrium point. Y** is the new equilibrium level of income which is lower than Y*. As a result of this decline in the level of real output, there will be a fall in employment as well.

The mechanism behind this effect is as follows:

As government spending falls, there is a reduction in the effective demand. This reduction causes real output to shrink. This decline in real output again leads to a fall in real aggregate consumption expenditure which in turn reduces effective demand again. This again reduces real aggregate consumption expenditure and so on. However the magnitude of the second fall shall be smaller than the first one due to the non-proportional dependence of consumption on real income. Therefore, as a consequence of the initial reduction in autonomous government spending, the real aggregate output falls with a multiplier effect from Y* to Y**.

References:

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