

Problem Set 4

Yet More Keynes

1. Here are some data on the Great Depression:

Year	Unemployment Rate	Real GNP	Consumption	Investment	Government Purchases
1929	3.2	203.6	139.6	40.4	22.0
1930	8.9	183.5	130.4	27.4	24.3
1931	16.3	169.5	126.1	16.8	25.4
1932	24.1	144.2	114.8	4.7	24.2
1933	25.2	141.5	112.8	5.3	23.3
1934	22.0	154.3	118.1	9.4	26.6
1935	20.3	169.5	125.5	18.0	27.0
1936	17.0	193.2	138.4	24.0	21.8
1937	14.3	203.2	143.1	29.9	20.8
1938	19.1	192.9	140.2	17.0	22.9
1939	17.2	209.4	148.2	24.7	35.2
1940	14.6	227.2	155.7	33.0	36.4

Year	Nominal Interest Rate	Money Supply	Price Level	Inflation	Real Money Balances M ^s /P
1929	5.9	26.6	50.6	--	52.6
1930	3.6	25.8	49.3	-2.6	52.3
1931	2.6	24.1	44.8	-10.1	54.5
1932	2.7	21.1	40.2	-9.3	52.5
1933	1.7	19.9	39.3	-2.2	50.7
1934	1.0	21.9	42.2	7.4	51.8
1935	0.8	25.9	42.6	0.9	60.8
1936	0.8	29.6	42.7	0.2	62.9
1937	0.9	30.9	44.5	4.2	69.5
1938	0.8	30.5	43.9	-1.3	69.5
1939	0.6	34.2	43.2	-1.6	79.1
1940	0.6	39.7	43.9	1.6	90.3

From *Historical Statistics of the United States, Colonial Time to 1970, parts I and II*. US Department of Commerce, 1975. Real GNP, consumption, investment, and government purchases are in billions of dollars at 1958 prices. The interest rate is the rate on prime commercial bonds. The money supply series is currency plus demand deposits, in billions of current dollars. The price level is the GNP deflator, with 1958=100. Real money balances are the money supply divided by the price level, and are in billions of 1958 dollars.

Economists have proposed various explanations of the onset, depth and duration of the Great Depression:

- a) *The classical story*. A negative shock in the labor market, reducing employment and output.
- b) *Spending hypothesis*. An exogenous fall in spending on goods and services.
- c) *Money hypothesis*. The Fed allowed the money supply to contract when it shouldn't have.
- d) *Debt deflation*. A decline in the price level transferred wealth from debtors to creditors. The latter had a lower propensity to consume, so consumption declined.

Using your knowledge of the classical, IS-LM and AS-AD models. Evaluate the evidence for each of these stories.

2. The demise of the planned economies of the Soviet Union and its satellite nations has turned almost every nation in the world in the direction of a market-oriented system based around private property and consumer choice. There are still great differences in institutional structure across national economies, but reliance on the market mechanism in allocating scarce resources and organizing economic activity is increasingly dominant. Many of these formerly planned economies have gone through an extremely difficult period of transition, suffering from rising prices, falling output, and high unemployment. Some have emerged with strong growth, declining unemployment, relative price stability. But other transition economies have become stuck in an apparent period of stagnation with high unemployment, rising prices, and falling output. Their current situation is often compared with the Great Depression in the U.S. and Western Europe in the 1930s. Do you think the remedy for the Depression that emerged for the Western nations is applicable to these stagnant transition economies? Why or why not? Explain.

3. In the short run, an expansionary fiscal policy has a very different impact on the rate of interest than an expansionary monetary policy. But in the long run, they end up having the same impact on the equilibrium interest rate." Do you agree or disagree? Explain fully.

4. The economy of Arden has been afflicted by considerable overall instability in recent decades, experiencing large cyclical fluctuations in real output, real interest rates, and the price level. To remedy this, the Central Bank of Arden is considering the adoption of a day-to-day "lean against the wind" strategy with respect to interest rates. That is, when interest rates show signs of rising, it will adjust the nominal money supply so as to bring them back down; when they begin to fall, it

will adjust the money supply to bring them up. In other words, the proposed strategy is to use monetary policy to keep the interest rate stable and, thereby, restore overall macroeconomic stability. As an internationally renowned economic consultant, you receive an urgent request from the King to apply your expertise to the situation in the fabled land of Arden.

Arden's Minister of the Central Bank asks your advice on this proposed "lean against the wind" monetary policy. "My two economic advisers are telling me exactly opposite things. Mr. Orlando swears that such a policy will bring economy-wide stability -- not only to interest rates, but to real output and the price level as well. But Ms. Rosalind warns that the opposite will occur -- that in taking steps to stabilize interest rates, we will end up destabilizing real output in the short run and the price level in the long run. How can they be saying such opposite things? Can you tell me some way I can determine which prediction is likely to be correct? And pray explain your reasoning."