PROBLEM SET 3
Due Wednesday, February 27

1) Compare and contrast how Keynesian and neo-classical theorists would explain what happened in the 1990-91 recession. How would the policy prescriptions in the two groups be different?

Keynesian theorists would say that there was a decrease in aggregate demand (or that aggregate demand did not increase as fast as aggregate supply) so that there was a gap between equilibrium employment and full employment. As a result, we had a recession and unemployment increased.

Neo-classical theorists, on the other hand, have a stronger faith in markets. The recession we observed was a natural result of changing market characteristics. The level of output achieved at equilibrium is always equal to full employment. And so the unemployment we observe is essentially “normal.”

Policy prescription follows directly from these views. Keynesians argue that government spending should be increased so that consumption is forced higher and aggregate demand is shifted out. Neo-classical economists say that this would simply hurt things. First, increasing aggregate demand can only affect the price level since aggregate supply is perfectly inelastic. Second, the taxes required to fund this spending will result in adverse incentives that discourage investment and work. And finally, the timing of the spending may actually end up during a time of increasing output and so, even if you believe the Keynesian framework, the policy may actually make things worse. If you want to increase output, neo-classicals would be willing to consider tax reductions that would increase incentives to invest and work. But they’d be for that whether in a recession or not. So it isn’t really a policy response to the recession.

2) With reference to the Laffer curve, what positive argument can be made that a 90% marginal tax rate (i.e. on the last dollar you earn, you pay 90 cents to the government) is too high? Using a normative analysis, tell me what you think the highest marginal income tax rate should be? (That is, how much of the next dollar that Bill Gates earns should be paid in taxes. You answer should be a short paragraph telling me the top rate you think is best followed by a brief paragraph justifying your response. No answer is wrong, but some justifications are more well-developed than others. Spend a minute or two considering your argument and presentation.)

Suppose you believe that government should be larger. If we have a 90% marginal tax rate, it is conceivable that people are actually reducing their work in a response to the tax system. If you reduced the rate to 50%, they will work more and so, because the tax base is larger, the total tax revenues will be larger. So the workers in question are better off, the government gets more money to distribute or spend as it wishes—all winners, no losers.

I can’t tell you what the top rate should be according to you. The Reader’s Digest collected poll data about 5 years ago and found that the most common answer regardless of age, race, or political affiliation was 25%.

3) Page 644 Q10

Classicals argue that deficits result in reduced private investment—crowding out. First, consider the investment saving market with no government. Supply is upward sloping; demand slopes down. An equilibrium level of investment and an equilibrium interest rate is determined. Now
the government decides it needs $100 M. This shifts the D curve to the right by $100 M since, at any interest rate there is now $100 M more demand. The equilibrium interest rate rises as a result. But at the higher rate of interest, fewer private demanders are interested in taking loans. And so private investment is crowded out by government expenditure. The result is slower growth. Recall that classicals don’t think much of the potential for fiscal policy to raise output in the short run.

Keynesians see things exactly reversed. As above, we know that they see government deficits as potentially useful in the short run to increase AD and output. But they don’t see the long run problem raised by crowding out. In the Keynesian model, the investment decisions of firms do not relate to the interest rate. And so there is no crowding out. That all said, Keynes did not argue for perpetual deficits. He argued for temporary deficits repaid later during boom times.

4) Page 709, Q1

This is just a review of the transaction, speculation, and precautionary motives that we talked about in your notes. I’ll let you consult your notes for this.

5) Page 710, #1 Except I want you to plot velocity for each quarter 1960-

![M1 Velocity: 1959-2001](image)

a) We see that velocity is not constant, but for the first 20 years it is very predictable. After 1980, however, there seems to be a change so that M1 velocity is no longer easily predicted.

b) In general, the rise in velocity shows that fewer units of M1 are being required for each dollar of GDP. That’s easy to understand given our increasing comfort with financial instruments and innovations in savings, mutual funds, and other investment accounts. People just don’t hold as much in their checking accounts (as a fraction of GDP) as they once did.

c) This question is a bit vague. If it means does the fact that velocity is not constant show monetarist policy (you increase money supply according to a rule—you do not use discretion), then the answer is clearly no. If I know what velocity will be (if it is predictable) then I can still
follow that policy. The second half of this graph presents a problem for the monetarist policy proposal not because velocity is not constant but because velocity is not predictable.

A second interpretation of the question is: Does this graph mean that monetarists are wrong when they say that discretionary monetary policy will not be effective. The answer there is clearly no. We can’t say anything about that with this graph alone.

6) Page 710, #3b And do you agree?

Arguments concerning moral fabric:
a) Inflation causes confusion about values that may encourage some people to “play tricks” on others (like forgetting to give inflationary wage increases) that come at the others’ expense.

b) It erodes trust in leaders. All of the contracts we work under today were created under the understanding that prices would remain relatively stable. If the government created policy to undermine that, then we may doubt our leaders in the future.

c) National pride depends in part on “sound” money—or low inflation.

d) Inflation makes it less worthwhile to save and so people consume more in the present. This may undermine some moral values like thrift.