

Do not write your name on the assignment. Write your name only on the back of this sheet of paper and staple your answers on the front of this sheet of paper. Failure to follow these directions will cost you 1 point on the assignment.

If the due date is too early in the week, we can change it, but remember that the test is later on in the week.

We will be meeting during my office hours on Monday. Come by some time between 3:00 and 5:00 to discuss this homework assignment and the material you are reading.

The review sheet is attached below.

This assignment covers pages 121 - 136. Note, it is fewer pages because of the test.

1) (15 points) What is the labor force participation rate? Why did it rise in the 1960s - 1990s?

2) (20 points) How does the rise in the labor force participation rate cause the natural rate of unemployment? Make sure you explain what the natural rate of unemployment is and why they are related.

3) (20 points) Why is it hard to measure the unemployment rate? Why else is it an inaccurate measure of how poorly we use the human resources?

4) (15 points) When we are trying to see where the economy is going, we normally look at M1 or M2. Why is that?

5) (15 points) If the inflation rate is 10% and the nominal interest rate is 32%, then how much is the real interest rate? How did you get that?

6) (15 points) What is the S&P 500? Why is it important?

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Business Cycles and Forecasting

Review Sheet for Exam 1

This review sheet is intended to cover everything that could be on the exam; however, it is possible that I will have accidentally left something off. You are still responsible for everything in the chapters covered except anything that I explicitly say you are not responsible for. Therefore, if I left something off of this sheet, it can still be on the exam. There will be no multiple-choice questions. Most of the questions will be like the ones in the homework assignments, and possibly a few definition questions, but I am more likely to ask questions that make you use the definitions rather than recite them.

There is no review session for this test. I will be available in my office from about 8:30 (possibly earlier if my review session for 162 runs short) until 10:00 if you have questions.

Chapter 1: What is macroeconomics? Do not worry about the circular flow. Know what the terms inflation, galloping inflation, hyperinflation, deflation, disinflation, frictional unemployment, structural unemployment, cyclical unemployment, balance of payments, budget deficit, and budget surplus mean. Do not worry about the Lorenz Curve or the Gini coefficient.

Chapter 2: What are primary and secondary data? What do the terms time series data, cross-sectional data, panel data, low frequency data, high frequency data, and real-time data mean? If I gave you a variable, be able to tell me which type of data it is. What are stocks vs. flows? Be able to calculate a Laspeyres price index, or real GDP, and Paasche price index. Know the limitations of the two. Know how we measure growth rates and convert them from monthly or quarterly to annually. (Technically, those are estimates of the conversions.) Know what is meant by first order difference and second order difference time series are. Know the additive version and multiplicative version of the trend, seasonal effects, business cycle movements, and random events. Understand the different types of trends, but only the first two are going to be important. Be able to know which form of the graphs on pages 36 and 37 a variable will take for its trend. For seasonal adjustments, be able to use the dummy variable, and the ratio to moving average method. Ignore the Census Bureau method. For cyclical components of the variable, use a variable that is tied to the cycle. Usually, the unemployment rate will be good, but sometimes cannot do that because you are doing something like forecasting unemployment. Ignore the residual approach. It has problems. For irregular and random components, know the difference between them. For this class, we will just use dummy variables for both, even though we probably shouldn't. Ignore section 3.

Chapter 3: What are the advantages of centralized and decentralized data systems? Which do we have? Do not worry about the history of the accounts. You should know who puts it out and how often. For NIPAs, be able to understand a table like Table 3.1. Understand why they add those particular items and why the left-hand side should equal the right-hand side. Ignore page 70. For the I-O tables, only worry about the table on page 76 and know how to read it. Page 75 will be of help. Know what the numbers in the IIPs mean. Ignore the FFAs. For the BPAs (sometimes incorrectly referred to BOPs), know what negative and positive numbers mean. What is meant by current account, capital account, merchandise account, surplus, and deficit. Why should the capital and current accounts add to zero? What are labor force participation rate, employment levels, and unemployment rates? How are the CPI and PPI calculated? Ignore IPIs. Know in general what M1, M2, M3, and L are. Note that the larger ones include the smaller ones. Know what the discount rate, federal funds rate, and prime rate are. Know what the spot and forward exchange rates are. Be able to use them to determine if it is expected that a currency will appreciate or depreciate. Ignore pages 97 - 100.

Chapter 4: Be able to know how to calculate nominal GDP, real GDP, real GDP as a percent of the base year (which is what I did when we first talked about the Laspeyres price index.), and real GDP per capita. Know what is and what isn't part of GDP. Note that investment is not buying stocks and bonds. Know how to calculate GDP, GNP, NNP, NI, PI, and PDI. What do they measure? What are capacity utilization rate, natural rate of unemployment a.k.a. full employment, and labor force participation rate? How do we get potential GDP? Do not worry about how we calculate the capacity utilization rate, just know what it means and why it is very difficult to estimate. How are the CPI and PPI calculated? In general, what is the difference between M1, M2, M3, and L? Explain why we care about more than one of them. Be able to calculate the real interest rate from the nominal rate in the accurate way and the estimate. Know why the accurate method is more accurate. Ignore consumer installment credit and futures. Know the definitions of the Dow Jones Index and the S & P 500 Index. Know who gets hurt and who gets helped by appreciation and depreciation of the currency. For residential construction, average workweek, and new orders, know why economists care about them.