

Wilfrid W. Csaplar Jr. Business Cycles and Forecasting Review Sheet for Exam 1 and the non-graded assignment #3A.

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. I will probably ask one of the questions from the workbook.

The optional review session for this test will be Tuesday 10/01 at a time to be announced.

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 Lapeyres 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.

Chapter 5 up to section II: For the different schools of thought, know in general what they think. There is no need for this course to know who said what -- you probably had to learn that in intermediate macroeconomics. Know why  $MV = PY$  is important. (Note that I changed Q to Y because normally Q represents the quantity of a particular good and Y is GDP. That is a new standard compared to the theories which originally used Q.) You will not need to know how the schools came to their conclusions until we finish the chapter after the test. Note that they have monetarism slightly wrong. They described the most recent version of neo-classical in that section. Monetarists feel that there are some lags in effects of events, but not long like Keynesians. Since the lags will mean that the effects of the policies will happen so much later that they could have an undesirable affect. Know what are endogenous and exogenous variables. Be able to calculate a reduced form and use that to calculate the multipliers. Be able to also show the model on the 45 degree diagram.

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Wilf Csaplar Jr. Economics 350 Homework #3A To be gone over on 9/30

This is a non-graded homework assignment that will be gone over the same class we go over assignment #3. The purpose of this assignment is to give you sample questions for the material we covered after you handed in assignment #3, and will be on exam.

1) (15 points each) For each part, tell me if that event will increase or decrease the autonomous expenditure multiplier. Explain why it would have that effect.

- A) People decide to save more for retirement.
- B) The income tax rate goes up. (Does the government ever lower it?)
- C) The marginal propensity to import increases.
- D) There is an increase in the amount of additional investment that is done when GDP increases.

2) (40 points) Suppose that  $C = 10 + 0.9(Y - T)$ ,  $T = 300$ ,  $I = 20 + 0.1Y$ ,  $G = 400$ ,  $X = 200$ , and  $M = 0.2Y$ . Find the equilibrium levels of GDP, consumption, investment, imports, and the autonomous expenditure multiplier. Show all work and briefly explain what you did. Warning: I did not check to see if the numbers worked.