

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 book at the end of the chapters.

The review session will be at a time to be determined in class, probably Wednesday, 11/15.

Chapter 9 (last half): What are the advantages and disadvantages of **patents**? Why do open economies grow faster? How does population growth affect development? Why are property rights important for growth? The **four keys to development** will help you to understand parts of the chapter.

Chapter 12: Note we will not be making the Assumption #4, that the economy is closed. We will assume an open economy. What are C, I, G, and X? What determines them? Know what moves the flatter line on the **45° diagram, a.k.a. the Keynesian Cross diagram**. *We only need the $E = Y$ line and $C + I + G + X$ line and to move it. The other lines, like the C and the $C + I$ lines were just to help you understand the main line. Ignore the savings line and the $S = I$ derivation of the model. It is mathematically the same as what we did and the book does, but it is more complicated to understand.* What are the **MPC, MPS, APC, and APS**? *Note that even though our model assumes the MPC is the same for rich and poor, it also concludes that the rich will have a lower APC than the poor. It is easier to notice a person's APC than MPC.* Know what changes C, I, G, and X. Why does consumption depend upon wealth, although not much? Why does investment depend upon interest rates? Ignore the planned versus unplanned investment. What is a lump-sum tax and how does it affect the 45° diagram? What determines net exports? What determines the size of the **government spending multiplier**? What is the economics behind it? How do we see it on the Keynesian Cross diagram? How do our assumptions about prices, interest rates, income taxes, and imports affect its size?

Chapter 10: What is meant by the term **long-run aggregate supply curve**? What determines its shape and its location? How does it relate to the PPF, a.k.a. the PPC? What is **aggregate demand**? Why does it take its shape? Note the logic used for the demand curve's slope does not apply to the slope of the aggregate demand curve. What moves the AD curve? *Anything that changes the demand for goods and/or services ($C+I+G+X$), other than price induced changes in the demand, will move AD. Remember that for all curves, if a variable on one axis changes causing the other variable to change, then you did not move the curve, you retraced it.* What causes inflation? What are **demand pull and cost push inflation**? The book goes into more detail in Chapter 11.

Chapter 11: Draw only the “modern SRAS” Curve. *The equilibrium is where SRAS and AD cross. If that point is to the right of the LRAS, then the unemployment rate is too low because GDP is above Y_{FE} , so we are producing too much. If that point is to the left of the LRAS, then the unemployment rate is high because GDP is down. Unless I tell you otherwise, start with all three curves crossing at one point.* Chapter 11: What are the four assumptions of the **classical school**? What did **Say say**? How does it relate to the **SRAS curve**? Note that we went into more detail than the book on that explanation. How does it relate to labor supply and labor demand? Why should $S = I$? What assumptions did **Keynes**

make? How did that relate to the SRAS curve? Why do we draw the “**Modern**” SRAS? *Unless I specify otherwise, when I refer to the SRAS, use the “Modern SRAS.”* What moves the SRAS? *Notice that the only thing that moves SRAS without moving LRAS is the price of inputs because they do not affect how much could be produced if we are at full employment.* Note the book has useful tables on Pages 229 (Chapter 10) and 253, which is slightly misleading in the next to last line. Marginal **business and/or sales** tax rates move the SRAS because it is a cost of production, while marginal **income** tax rates affect aggregate demand because they reduce income, not raising the cost of production. The prices of inputs only temporarily affect the costs of production without any long-term effects. Since expected future price increases will increase wages, which are an input price, it will move only the AD and SRAS curves but not the LRAS curve. What is meant by **supply shock** and **demand shock**? *Unless specified otherwise, use the “modern” SRAS curve when asked for the SRAS curve. If you are not told that unemployment is high or low, start your graph with LRAS crossing SRAS where it crosses AD.* What are **inflationary and recessionary gaps**? How will they solve themselves if the government takes no actions? What are the demand pull and cost push inflations? How does a change in the value of the dollar on the foreign exchange market affect the SRAS/LRAS/AD diagram? *Note that the book should combine the panels in Figure 11-13. Unless specified otherwise, use the “modern” SRAS curve when asked for the SRAS curve. If you are not told that unemployment is high or low (recessionary gap or inflationary gap respectively), start your graph with LRAS crossing SRAS where it crosses AD.*

Chapter 13: What is fiscal policy? What should the government do with taxes and spending if there is an **inflationary gap** or a **recessionary gap**? Show those actions on the **LRAS/SRAS/AD diagram**. What are the drawbacks of doing fiscal policy, for example, **crowding out investment**, **direct expenditure offset**, and **lags**? Why are these problems? What is the **Laffer Curve** and why does it matter? What is Ricardian Equivalence and why should it hold? Note that **Ricardian Equivalence**, the size of crowding out and lags are often debated among economists. What are **automatic stabilizers**?

Chapter 14: What determines the size of the **government deficit/surplus**? Why should we know the unemployment rate when considering the desirability or lack of desirability of the deficit? How does a deficit differ from the **debt**? Be able to calculate the **full-employment deficit**. What is the difference between **gross public debt** and **net public debt**? What are the problems caused by them? To what extent are these arguments valid: **high interest payments hurt**, **future generations must pay the debt**, **crowding out**, **constrains the budget in the future**, and **we owe foreigners the money**? How is the government deficit related to the **trade deficit**, i.e., the **twin deficits**? Why is it important to know why the deficit is big? How are the short-run and long-run effects of the deficit different? Why is it difficult to reduce the deficit? For example, why are most expenditures tough to cut and why isn't raising taxes a good option? Why did **Paul O'Neill** say that the government owes a lot more than the amount they borrowed? See the course “[Announcements](#)” page for amazing statistics on the debt.

Non-graded Homework #9A to be reviewed Homework #9

1) (25 points) Suppose the government's tax revenue is $T = .2Y$, the government spending is \$1000, and government transfers are $TR = 500 - .1Y$. If GDP is \$6000, then how much is the budget deficit or surplus? If the full employment GDP is \$4000, how much is the full-employment deficit or surplus? For both parts show all work and conclude your answers with either, “The deficit is...” or “The surplus is...” Is the government doing good fiscal policy? Explain your logic.

2) (15 points each) Answer each part in separate paragraphs. For each part, explain how the debt could cause that problem. Then tell me which debt, gross public debt, net public debt, or Paul O'Neill's debt, is most likely to cause that problem. Explain your logic.

A) crowding out

B) It limits what the government can spend in the future.

3) (15 points) Answer each part in separate paragraphs. For each part, explain why that may make counter-cyclical fiscal policy either less effective, ineffective, or counterproductive. Do you feel it is a strong argument? Explain your logic.

A) direct expenditure offset

B) lags

4) (15 points) According to CNN's webpage, Rep. Andy Harris of Maryland said. "Sadly this debt will be paid by our children and grandchildren." Is that a valid argument? Explain your logic.

<https://www.cnn.com/2022/02/02/politics/national-debt-what-matters/index.html>

On a side note, Heritage.org wrote, "Congress must implement a strong budget framework that reduces the national debt and restores sanity to budgeting. If lawmakers fail to do so, we will all pay a price, but our children and grandchildren could pay the highest price of all." This is because of the reduced economic growth caused by the increased burden of the interest payments.

<https://www.heritage.org/debt/commentary/future-generations-will-pay-the-price-runaway-national-debt>

Review sheet for the material after Exam #3

Chapter 15: Why should money be a good **medium of exchange, unit of account, store of value, and standard of deferred payment**? What is meant by **liquidity**? What backs our money? Know what is in **M1** and **M2**, but not **M3**. You only have to know the items in them that the book mentions. (There are other parts of **M2** and **M3** that the book leaves out.) Know the properties of each item in them. Know what happens when we move money between them. *Hints: Do not forget that M1 is in M2. Unless you are taking a loan, then M2 doesn't change.* What is **financial intermediation**? What are **adverse selection** and **moral hazard** and why are they a problem? Do not worry about what each organization in Table 15-2 does. What is the **Federal Reserve**? What does it do? What are its tools? How do they affect the money supply? The map of the Federal Reserve Districts incorrectly has us in the Richmond District. We are in the Cleveland District. Do not worry about the balance sheets or the money multiplier. What is the **FDIC**? How does it result in moral hazard and adverse selection? Ignore the rest of the chapter.

Chapter 16: What determines the demand for money? What are transaction, precautionary, and asset demand for money? Be able to move the **MS** and **MD** curves. Ignore the S/D for bonds. Illustrate the effects of **monetary policy** on LRAS/SRAS/AD diagram. Understand why **MV=PY**. Understand why **monetarists** do not like monetary policy. (This is the lags from Chapter 13 again, but they are of different lengths than they were there.) Why can't the Fed choose to set both interest rates and the money supply? What is the **Keynesian liquidity trap**? Why might that mean monetary policy won't work?

Questions based upon the material after Exam #3.

1) (40 points) Draw the MS/MD diagram and the LRAS/SRAS/AD diagram. Illustrate the effects of the Fed buying bonds. Explain why the curves moved as drawn. What happens to interest rates, GDP, inflation, and unemployment rate.

2) (25 points) Draw the MS/MD diagram to show a Keynesian Liquidity Trap. Use the diagram to prove that monetary policy is ineffective for an economy in that situation. Go to the page below and scroll down the page to the table about $\frac{1}{2}$ way down. Do you think Japan was in this situation in 2018-2019? Explain your logic.

3) (15 points) What is *adverse selection*? Explain why it occurs and how banks avoid it.

4) (10 points each) For each quality of money, tell me if M1 or M2 does a better job at that. Explain your logic.

A) store of wealth

B) medium of exchange.

Review sheet for the two parts of the final.

The optional review session for the first part of the final will be determined by group decision. The first half of the final will be the last class (12/5) and the second half is Thursday, December 7th, 1:00 - 3:00 PM. The review sessions for the two halves of the final will be determined at a later date.

The second half of the final will be just like the second half of the final for the last semester. However, I will change the numbers and I may slightly change the manner which I assign points or improve the wording. If I were you, I would use a Keynesian, but not extreme Keynesian, approach to solve the problem because it is easier to solve problems in a Keynesian world. (That does not mean that Keynes is right, just easier to deal with.) For the second half of the final, you will probably want to practice showing policy on the SRAS/LRAS/AD diagram, 45° diagram, and the MS/MD diagram **at the same time**. Make sure that GDP goes the same direction in the two diagrams with it on the X-axis. **The second half of the final** is open book and notebook.

The first part of the final will be held during the last class. It will cover the material that is not directly covered by the second half of the final. For example, I will not ask you to show an increase in the money supply on the LRAS/SRAS/AD diagram. Anything on any review sheets that is not explicitly covered in Part 2 of the Final is fair game. This part of the final is closed book and closed notes, just like all other tests.

When I write the final, I look to see what I did not ask about, and what were the major topics. I write questions about those topics. (Obviously, opportunity costs, supply/demand, and Social Security will be on the first half of the final.) I try to get the questions evenly distributed from all the tests. However, the second half of the final covers much of the material for Test #3, after Test #3, and some of Test #2. Therefore, much of the material for the first half of the final will be on material from Test #1 & some from #2, with possibly a question or two from Test #3 and after Test #3.