- 1. Machlup, Fritz. "Why Economists Disagree." *Proceedings of the American Philosophical Society* 109 (Feb. 18, 1965): 1-7. http://www.jstor.org/stable/985773
- a. This 50+ year old article does an excellent job of explaining why economists disagree. List the four causes of disagreement cited in the article. For each, briefly define the cause or illustrate it with an example.
- b. Two economists can disagree, sometimes strongly. The best of economists do not resort to ad hominem arguments in these disagreements, recognizing that they are using different models. What three things characterize an economic model? Drawing on the four causes of disagreement listed in the article, which characteristics of economic models create the disagreements between economists?
- c. What is the difference between "positive economic analysis" and "normative economic analysis"? Which causes of disagreement between economists are part of positive analysis? Which are part of normative analysis? Can disagreements in the normative realm be resolved? Discuss with the members of your group.

- "How to Understand the Economic Impact of Transport Networks," by Ejaz Ghani. World Economic Forum, 23 Jul 2015. https://www.weforum.org/agenda/2015/07/how-to-understand-the-economic-impact-of-trans-port-networks/
- a. What transportation project was studied by the author? What was the finding? Highlight and define any terms or phrases anyone in your group does not initially understand.
- b. In addition to transportation networks, what are other factors that can foster economic growth through productivity? Draw a PPF that illustrates the effect of productivity change on an economy. Did you draw symmetric or asymmetric growth? Defend your choice to your group members.
- c. Look at factors your group members listed in part (b). If you were a policy maker trying to encourage growth in a developing country, which factor would you focus on? Why? Would your answer be different if you faced budget constraints? Why? In your group, settle on one policy that the group would support and be prepared to defend your choice to your classmates.

- 3. "How Marriage Survives," by Justin Wolfers. *New York Times*, October 12, 2010. http://www.nytimes.com/2010/10/13/opinion/13wolfers.html
- a. What are data regarding marriage trends cited in the article?
- b. Wolfers says "It used to be that a typical marriage involved specialized roles for the husband and wife. Usually he was in the marketplace, and she was in the home, and this arrangement led to maximum prodctivity." Use the model of comparative advantage coupled with information from lecture regarding pre-1970s U.S. patterns of gender-based education to explain why marriage in the U.S. produced more gains from trade circa 1970 than it does today.
- c. Based on knowledge from your other classes of other cultures and places and times, with your group members come up with three examples of differences across cultures, places, or time in the extent of gains from trade through marriage. (Cite the classes that are the source(s) of your knowledge.) Defend each example. Be prepared to share one of your three examples with the entire class.

- 4. "Economics Has Failed America," by Daniel Altman. *Foreign Policy*, May 19, 2016. http://foreignpolicy.com/2016/05/19/economics-has-failed-america-globalization-trade/
- a. Which textbooks does the author cite in his article? In each case, how much do the authors write in their books about the costs of specialization and trade?
- b. First, write out the argument about the existence of gains from trade. ("If we assume this __ and this __, then we can conclude that there are gains from trade"). Then, write out an argument that points out the costs of specialization and trade. Now, identify which parts of your two arguments are examples of "positive" economic analysis and which parts of "normative" economic analysis. If you identified aspects of your arguments that were normative, revise your argument until it is completely positive economic analysis and not normative.
- c. Some estimates are that more than 25 percent of all college students take a Principles of Economics class (http://www.jstor.org/stable/1183192). Nearly all of those Principles courses teach the gains from trade. Relatively few teach about the costs of specialization and trade. How do you think what is taught in economics principles courses affects the public policies that our elected officials enact?

- 5. "How Scalpers Make Their Millions With 'Hamilton'," by Tiff Fehr, *New York Times*, July 29, 2016. http://nyti.ms/2a4y7or
- a. What is "Hamilton?" What was special about the July 9, 2016 performance?
- b. Drawing on the article, sketch a model of supply and demand that shows why the price of scalped tickets for the July 9, 2016 performance was so much greater than it had been in May. Identify the forces that shifted demand and those that shifted supply.
- c. Many venues do what they can to stop "bot-driven ticket buying." Most of us have had the experience of trying to buy a ticket for an event seconds after they go on sale, only to find nearly all tickets are sold, and then to find those very same seats on a resale site a few minutes later. Do you think it is fair that "bots" can outsmart the venues, purchase thousands of tickets, and sell those tickets on the secondary market? Do you think it is economically efficient? Discuss with the members of your group.

- 6a. "In Praise of Price Gouging," by John Stossel. Posted at *Townhall.com*, September 7, 2005. http://www.townhall.com/columnists/JohnStossel/2005/09/07/in_praise_of_price_gouging
- 6b. "Dear Harvard Prof: Your \$2,500 Ticket for 'Hamilton' Doesn't Mean Price-gouging Is a Good Thing," by Michael Hiltzik. *Los Angeles Times*, October 24, 2016. http://www.latimes.com/business/hiltzik/la-fi-hiltzik-price-gouging-20161024-snap-story.html

Note the date of the Stossel article: it was written in 2005, one week after Hurricane Katrina hit.

- a. Stossel begins with a (hypothetical) story of someone paying \$20 for a bottle of water. Use a supply and demand graph to illustrate how the equilibrium price of a bottle of water might have risen, post-Katrina in New Orleans, from \$1 to \$20 a bottle. Is the increase in price of a bottle of water a result of a change in demand, change in supply, or both? In the case of the Hamilton tickets, is the increase in the price of a ticket to \$2,500 the result of a change in demand, change in supply, or both?
- b. When the price of a bottle of water rises to \$20, Stossel claims "water goes to those who really need it." Do you agree? Use economic terms and concepts to explain why you think water does (or does not) therefore go to those who really need it. Would your analysis in this part be any different if you were analyzing the \$2,500 ticket to Hamilton instead of bottles of water following a hurricane?
- c. Laws against price gouging in the wake of a natural disaster might create a market disequilibrium. What non-price mechanism to allocate the desired goods would you and your group members argue in favor of? What is your argument?

- 7. "Sales Fall Again in Mexico's Second Year of Taxing Soda," by Margot Sanger-Katz. *New York Times*, Feb. 22, 2017. https://nyti.ms/2m97dkX
- a. When did Mexico's tax on sugary drinks take effect? What was the effect on sales in year 1? In year 2? Which group of consumers reduced their consumption the most?
- b. The tax is about 1 peso per liter which is about 10 percent of the price. Draw a graph showing the effect of the tax in year 1. Come to consensus with your group members regarding how to show the "habituation" effect of the tax in year 2. Together explain how your graph shows that the largest drop in purchases was "among the poorest Mexicans."
- c. Opposition to soda taxes often cites the regressivity of such excise taxes. An alternative is to structure the tax so it is a percent of the buyer's income rather than a percent of the good's price. For instance, in Finland, the price of a speeding ticket depends upon the driver's income. (http://www.theatlantic.com/business/archive/2015/03/finland-home-of-the-103000-speeding-ticket/387484/) Should the tax on soda be based on the income of the consumer rather than the price of the product? Discuss with the members of your group.

- 8. "How Chicken Wings Explain Metro's Looming Ridership Problems," by Martine Powers.

 **Washington Post*, April 13, 2017.

 https://www.washingtonpost.com/news/dr-gridlock/wp/2017/04/13/how-chicken-wings-explain-metros-looming-ridership-problems/
- a. Who is Daniel Lin? What concept is he illustrating with the example of chicken wings?
- b. The Metro in DC is very similar to our Bart system, with the fare dependent upon the distance traveled. The one difference between the two systems is that the Metro charges higher fares during commute time than it does during "off-peak" time.
 - Based on the three factors that affect price elasticity of demand, what would you argue are the likely short-run and long-run effects of an increase in DC Metro fares? In what case(s) should the Metro increase fares?
- c. You are hired to analyze the effect on total revenue of a proposed increase in fares at Bart. With your group, make a list of what data you would gather and over what time period in order to determine the effect.

- 9. "Under Pressure from Uber, Taxi Medallion Prices are Plummeting," by Josh Barro, *New York Times: The Upshot*, November 27, 2014. http://nyti.ms/1Fx7ook
- a. What is Uber? How do you get an Uber ride? How do you pay for it? What is a taxi medallion? What has happened to prices of taxi medallions in New York and in Boston?
- b. Use the model of supply and demand to illustrate (separately) the markets for Uber rides and for taxi rides. Distinguish between a run-of-the-mill weekday and a time (such as Halloween) when demand is very high. What is the effect of Uber on profit for taxi drivers? Do your results help explain what is happening to prices of taxi medallions?
- c. Some localities ban Uber and Lyft. (See http://www.independent.co.uk/travel/news-and-advice/uber-ban-countries-where-world-taxi-app-europe-taxi-us-states-china-asia-legal-a7707436.html for a recent list.) Others allow the services to operate. With your group members, construct a list of the reasons for and against allowing Uber and Lyft to operate in an area, keeping in mind economic principles. Under what (if any) circumstances does your group recommend banning Uber and Lyft?

- 10a. "Striking it Richer: The Evolution of Top Incomes in the United States", updated June 2016, by Emmanuel Saez, June 30, 2016. http://eml.berkeley.edu/~saez/saez-UStopincomes-2015.pdf
- 10b. "Economic Growth in the United States: A Tale of Two Countries," by Thomas Piketty, Emmanuel Saez, and Gabriel Zucman. Washington Center for Equitable Growth blog, December 6, 2016.
 http://equitablegrowth.org/research-analysis/economic-growth-in-the-united-states-a-tale-o-f-two-countries/
- a. Use the article by Prof. Saez to answer these questions. For each answer, <u>cite the page or figure #</u> where you found the answer. (Note that the pagination is odd with the first page as page 0.)
 - What is the source of Professor Saez's data?
 - How much did real average income per family increase in 2015? What was the rate of change for the top 1%? For the bottom 99%? Did inequality increase or decrease in 2015 relative to 2014?
 - From 2009-2015, by how much did average income per family grow? What was the increase for the top 1%? For the bottom 99%?
 - From 2007-2009, by how much did average income per family decrease? What was the decrease for the top 1%? For the bottom 99%?
 - Approximately what % of income did the top 1% receive in 1998? In 2007? In 2015?
 - What was the dollar cutoff in 2015 for the top 1%? The top 5%? The top 10%

Based on that last set of answers, would you say a family in the U.S. earning \$150,000 per year is earning a "middle class" income?

- b. Using the second article by Piketty, Saez, and Zucman, answer these questions. Which group received the most income growth, 1980-2014? What is the effect on income inequality? (Based on Figure 1), have tax policies helped or hurt the households in the bottom 50 percent of the income distribution? How does Figure 2 illustrate increased inequality? Defend your answers with your group members.
- c. Piketty, Saez, and Zucman suggest four policies that could increase the pretax income of the households in the bottom 50 percent of the income distribution. With your group members, come to consensus and rank these four policies from 1 (most important to implement) to 4 (least important to implement). Defend your ranking. Make note of which parts of your defense are based on economic principles and which parts are non-economic. Be ready to defend your ranking to your classmates.

- 11. "What's Wrong with Airbnb?," by Frances Woolley, *Worthwhile Canadian Initiative*, July 15, 2016. http://worthwhile.typepad.com/worthwhile_canadian_initi/2016/07/whats-wrong-with-airbnb.html
- a. Woolley distinguishes between the long-term and short-term rental accommodation markets. Describe each of those markets. Who are the buyers? Who are the sellers?
- b. Consider whether the market for Airbnb apartments is a monopolistically competitive market. Are the characteristics of monopolistic competition satisfied by this market? Draw graphs that show the market for Airbnb rentals [1] before the recent big expansion of Airbnb and [2] now. What do your graphs say about the level of economic profits for Airbnb landlords?
- c. Many communities, especially in popular areas like New York City and the San Francisco Bay Area, are moving to ban or limit Airbnb rentals, arguing that Airbnb rentals are driving up apartment rents for full-time residents. Do you think Airbnb rentals should be allowed in Berkeley? Discuss with your group members.

- 12. "Is It Time To Ban Computers From Classrooms?," by Tania Lombrozo, *NPR.org*, July 11, 2016. http://www.npr.org/sections/13.7/2016/07/11/485490818/is-it-time-to-ban-computers-from-classrooms
- a. What are the problems cited in the article with the use of laptops in class? What did Professors Mueller and Oppenheimer find in their research comparing taking notes by hand with taking notes on a laptop?
- b. In the language of economics, describe the negative externality created when a student uses the laptop during class for something other than note-taking. Draw a graph that depicts the market-equilibrium and social optimal quantity of laptops in class.
- c. Is it possible to institute a policy that brings the use of laptops to the social optimum? Does the banning of laptops produce the socially optimal quantity of laptops in class? Discuss with your group members.

- 13. "Information Asymmetry: Secrets and Agents," *The Economist*, July 23, 2016, http://www.economist.com/node/21702428/print
- a. What is the example that Prof. Akerlof used to introduce the concept of information asymmetries? (Don't just state the product; go through the entire example and be sure everyone in your group understands it.)
- b. What is signalling? Why is signalling more difficult in labor markets in the state of Washington? What is screening? How does it affect markets beset by asymmetric information?
- c. Consider the market that is "admissions to college." The colleges and universities are the buyers. The prospective students are the sellers. Describe the information asymmetries that affect this market.

Some private high schools are considering dropping grades altogether (see for instance https://www.insidehighered.com/news/2017/05/10/top-private-high-schools-start-campaign-kill-traditional-transcripts-and-change or https://www.washingtonpost.com/opinions/why-getting-rid-of-grades-would-help-rich-student-s--and-hurt-poor-ones/2017/05/11/b038f90c-3683-11e7-b4ee-434b6d506b37_story.html). If college admission officers did not consider high school grades, would this increase or decrease the information asymmetries in college admissions? Why?

Together with your group members, identify 1 or 2 strategies you think colleges and universities should take to lower the asymmetries. Be ready to defend your choice(s) to your classmates.

- 14. "Overcoming an Aversion to Loss," by Carl Richards. *New York Times*, Dec. 9, 2013. https://nyti.ms/2jPltNe
- a. What experiment regarding loss aversion does Kahneman use in his class? What is your own answer to his question? What are the answers of the other members of your group?
- b. Define loss aversion. Are people who experience loss aversion more or less likely to put their wealth in the stock market? Are bankers who experience loss aversion more or less likely to issue loans to risky endeavors? Be sure everyone in your group agrees on the answers to these questions and can explain why their answers are correct.
- c. In your group, come up with 2 or 4 additional examples of how loss aversion could affect the economy. Should we simply accept that some people experience loss aversion, or should we try to "overcome" it in some way? Discuss with your group members.

- 15. "The Big Question for the U.S. Economy: How Much Room Is There to Grow?," by Neil Irwin. *New York Times*, Feb. 24, 2017. https://nyti.ms/2lCCp9f
- a. Go to the following sources and locate U.S. data as indicated. You can pull this up on a laptop of someone in your group, or each of you can find the data and look at it on your own laptop.
 - From Fred (https://fred.stlouisfed.org/), plot real potential GDP and real GDP on the same graph, 1980-present
 - From Fred, plot civilian labor force participation rate and the labor force participation rate for workers ages 25-54 on the same graph, 1980-present
 - From Fred, plot the civilian unemployment rate and the U6 unemployment rate ("Total unemployed, plus all marginally attached workers plus total employed part time for economic reasons [U6RATE]") on the same graph, 1980-present. The U6 rate starts in 1994, so for 1980-1994 you will have only the civilian unemployment rate
 - From the Calculated Risk Blog, find the office vacancy graph (google "calculated risk office vacancy")

What does each of these graphs suggest to you and your group members about how much room there is for the U.S. economy to grow?

- b. Connect the concepts covered in Irwin's article with the concept of the PPF and the ideas of growth we covered in week 2 of the semester. Doing so means you are considering the "supply side" of the macroeconomy the determinants of potential (not actual) GDP. With your group members, identify and discuss 1 or 2 policies that can encourage growth in the U.S. economy in the next few years. Does everyone in your group support implementing the policy?
- c. Without getting into a raucous political debate over the 2016 Presidential candidates, discuss with the other members of your group the ways in which the low-growth world impacted the 2016 Presidential campaign.

- 16. "The Problem with Poor Countries' GDP," by Bill Gates, *Project Syndicate*, May 6, 2013. http://www.project-syndicate.org/commentary/poor-countries-need-more-accurate-gdp-data-b y-bill-gates
- a. What is the definition of GDP? Of per capita GDP? Why does the author, Bill Gates, think per capita GDP is not a good indicator of economic conditions?
- b. Describe two events from the past (actual, not made up) that have impacted living standards but are not well measured by GDP. Try to come up with one event for which living standards rose more than GDP would indicate, and one event for which living standards rose less than GDP would indicate.
- c. If the measurement of GDP were reformed, in what ways would the lives of average citizens in rich countries such as the U.S. be affected? In what ways would the lives of average citizens in poor countries such as Zambia be affected? Discuss.

- 17. "The Different Experiences of Black Unemployment and White Unemployment," by Sarah Rawlins and Nick Buffie. *CEPR Blog*, March 30, 2017.

 http://cepr.net/blogs/cepr-blog/the-different-experiences-of-black-unemployment-and-white-unemployment
- a. Based on the article, what were the unemployment rates by race by gender in 2016? What was the duration of unemployment by race by gender in 2016? Are there age brackets in which the differences by race was more (or less) pronounced? (Here, think about the percent difference not the percentage point difference. For instance, 12 percent is 50 percent more (and 4 percentage points more) than 8 percent.)
- b. Go to https://www.bls.gov/ and find the most recent "Employment Situation" report. (The easiest way to find it: on the far right under "Latest Numbers," click on the phrase "unemployment rate.") Locate the table(s) that provide the unemployment rate by race or ethnicity. Use the "seasonally adjusted" data. How do current (September 2017) differences compare with those in the CEPR blog report you read?
- c. We think of policy makers as having a goal for the aggregate civilian unemployment rate. For instance, the goal may be to have an unemployment rate of 5 percent, or 4.5 percent, or 4 percent. But if the aggregate unemployment rate is 4.5 percent, then some subgroups of the economy will have an unemployment rate that is above 4.5 percent. (Here, look not just at differences by race and gender, but also by educational attainment and other factors.) With your group members, grapple with this question: should we have a goal of "the unemployment rate should fall to x" when achieving that goal means that some sub-groups will have an unemployment rate <x and other groups will have an unemployment rate >x?

- 18. "Wealth Inequality and the Marginal Propensity to Consume," by Nick Bunker, *Washington Center for Equitable Growth*, December 17, 2014. http://equitablegrowth.org/news/wealth-inequality-marginal-propensity-consume/
- a. What is the definition of "marginal propensity to consume"? Express the definition in words and in mathematical terms. Be sure everyone in your group agrees on the mathematical expression. Check with the group next to you to be sure they too agree.
- b. According to the study by Chris Carroll et al cited in the article by Bunker, does the value of the mpc depend upon the amount of wealth a family has? Does it depend on the type of wealth the family has? Be specific. Relate the findings in the Bunker article to reader article #11 (wealth inequality).
- c. The concepts in the article can be expressed with the slope of the consumption function. Draw a graph that illustrates the concepts in each of the two articles.

- 19. "More Services Means Longer Recoveries," by Martha L. Olney and Aaron Pacitti, *The Berkeley Blog*, May 2, 2013. http://blogs.berkeley.edu/2013/05/02/more-services-means-longer-recoveries/ Full paper available at http://eml.berkeley.edu//~olney/olney-pacitti%2007-29-16.pdf
- a. Economies produce, broadly, goods, services, and structures (buildings). What has happened to the share of output that is services over the last several decades? What has happened to the length of business cycles over that same period?
- b. According to Olney and Pacitti, why does a rise in the service share of an economy lead to longer recoveries? Can you think of other reasons why a rise in services might be correlated with longer economic recoveries?
- c. If the longer recoveries are the consequence of the rise of services, are there public policies we can propose that would hasten economic recovery? Are there costs to imposing those policies? Should we propose and enact such policies?

- 20. "Loss of Steel Jobs Lingers in Fairfield," (Transcript) *NPR Weekend Edition Saturday*, June 10, 2017. http://www.npr.org/2017/06/10/532350843/loss-of-steel-jobs-lingers-in-fairfield
- a. Beyond the layoffs of U.S. Steel workers, what other sectors of the economy were affected by the closing of U.S. Steel? Highlight each mention of other affected sector(s) in the article.
- b. Define the concept of the multiplier. Connect your diagram in part (a) with the concept. If the article had continued with each and every job loss experienced in the Fairfield, Alabama area, what industries do you think would have been represented in the additional rounds of the multiplier process?
- c. When people are laid off, they have two choices:
 - continue to spend the same amount, paying for goods and services by draining their assets (withdrawing savings, for instance) or accumulating liabilities (charging credit cards, for instance), or
 - cut spending, perhaps as much as dollar for dollar with the loss of income The more laid-off families borrow, the smaller the multiplier. The more laid-off families cut spending, the larger the multiplier and thus the greater the damage of "one layoff" to a whole town. Is it good for laid-off people to borrow and maintain their spending? Discuss with your group members. (It's a normative question. Start by stating a goal.)

- 21. "In the Age of Trump, the Dollar No Longer Seems a Sure Thing," by Peter Goodman. *New York Times*, Aug. 9, 2017. https://nyti.ms/2uFutGS
- a. Between January 1 and August 9, 2017, did the US dollar get weaker or stronger vis-à-vis the euro? The pound? The yen? Does that mean one US dollar exchanged for more units of foreign currency, or fewer units of foreign currency? Does it mean the dollar price of foreign currency increased or decreased?
- b. Aside from the need to pay for internationally traded good and services, one factor affecting the extent of currency exchange is "greed" chasing the best rate of return on wealth on a global stage. Explain why the Fed increasing interest rates has an effect on the exchange rate between the dollar and the euro. Draw a graph that shows the effect. Check with your group partners to be sure everyone has a clear and thorough understanding of the process by which increased U.S. interest rates affects exchange rates.
 - Another factor affecting the extent of currency exchange is "fear" wishing to avoid holding one's wealth in a currency that is likely to suffer future loss. As global wealth managers increasingly fear a future fall of the dollar vis-à-vis the leading currencies (euro, pound, yen), what is the effect on the dollar? With your group members, draw the relevant graph.
- c. Is a weaker dollar good for the US economy? Discuss with your group members.

- 22. "How Powerful are Fiscal Multipliers in Recessions?," by Alan Auerbach and Yuriy Gorodnichenko, *NBER Reporter 2015 Number 2: Research Summary*, 2015. http://www.nber.org/reporter/2015number2/auerbach.html
- a. According to the article, what happens to the size of the government spending multiplier over the course of the business cycle? When is it large? When is it small?
- b. There are two possible reasons that the size of the government spending multiplier may vary over the course of the business cycle.
 - Consumer spending responds more to changes in income in a downturn than in an expansion
 - In a downturn, monetary authorities do not raise interest rates which would otherwise cause investment spending to fall just as government spending was increasing

Let's consider the first of those two possibilities. If consumer spending responds more to changes in income in a downturn than in an expansion, why and how does this impact the size of the multiplier? Explain your answer in words and with mathematical terms.

c. Use the production possibilities frontier model, with the types of output divided into government goods and services and all other goods and services. Show the effect of increasing the production of government goods and services. Does it matter whether or not you begin on, versus inside, the production possibilities frontier? Relate this analysis to this article.

- 23. "Walmart and Banking: It's Time to Reconsider," by Lawrence J. White. *Money and Banking blog*, May 15, 2017.

 http://www.moneyandbanking.com/commentary/2017/5/13/walmart-and-banking-its-time-to-reconsider
- a. What does it mean to be unbanked? To be underbanked? What income groups are most likely to be unbanked? To be underbanked?
- b. Suppose Walmart banks are allowed to exist. Further suppose that Walmart banks will lend primarily to existing Walmart customers. Use T-accounts to illustrate how lending creates money. Be sure everyone in your group understands.
- c. Walmart stores currently offer a large number of financial services (https://www.walmart.com/cp/walmart-money-center/5433) including check cashing, money transfers, money orders, bill paying, and credit cards. But they do not offer savings accounts or other means of saving. Suppose that being banked causes individuals to save more than they would if they were unbanked or underbanked. In this case, what effect would Walmart banks have on saving in low- and moderate-income households? With your group members, debate this question: Should Walmart be allowed to enter banking?

If you are interested in reading more on this subject, check out these two books by Prof. Mehrsa Baradaran (http://www.law.uga.edu/profile/mehrsa-baradaran): How the Other Half Banks, and due out this fall, The Color of Money: A History of Black Banking.

- 24. "Federal Funds and Interest on Reserves," Federal Reserve Bank of New York,
 https://www.newyorkfed.org/aboutthefed/fedpoint/fed15.html and "FAQs about Interest on Reserves and the Implementation of Monetary Policy," Federal Reserve Bank of New York,
 https://www.newyorkfed.org/markets/ior_faq.html
- a. Define each of the following:
 - FFER (aka, FFR)
 - IOER
 - FOMC

When did the Fed start paying interest on reserves?

b. How does the New York Fed facilitate changes in the FFR? Is the Fed a party to transactions in the federal funds market? Use a graph to show the effect of increasing bank reserve balances on the FFR. Be sure everyone in your group can draw and explain the graph.

After November 2008, who became the primary sellers of federal funds?

c. With your group members, make a list of unanswered questions you have. (Some questions that start to go on the list will be answered satisfactorily by someone else in the group, so those questions do not remain on a list of "our group's unanswered questions.") Once your group has your list of unanswered questions, form a group of 8 with another group. Some of the questions on your list will be answered satisfactorily by someone in that other group, so those questions do not remain on your list of "our group's unanswered questions." After meeting in a group of 8 (or more if time and the room permit), post the remaining unanswered questions to Piazza. Be sure to search first to see if anyone else has already posted your question. If the question is already posted, you can add a follow up, or just click "good question." Check out the questions others have posted and post answers to those you can answer.

25. "Fed, Leaving Rates Unchanged, Expects to Wind Down Stimulus 'Relatively Soon'," by Binyamin Appelbaum, *New York Times*, July 26, 2017. https://nyti.ms/2tKqm0m

NOTE: The article was written in July 2017; you are reading it in November 2017. Did the Fed increase interest rates in its September 19/20 meeting? What about the October 31/November 1 meeting? Check the news or go straight to the source: https://www.federalreserve.gov/monetarypolicy/fomccalendars.htm

- a. According to the article, what is the Fed's current policy with regard to monetary stimulus? What is the nature of the debate at the Fed, as described in the article?
- b. The Fed is guided by a "dual mandate." What does that mean? Use the concept of the Phillips curve to illustrate the tension the Fed faces between addressing unemployment and inflation.
- c. Which part of the dual mandate do you think the Fed should emphasize? Why?

- 26. "The Essential Guide to Who's a Policy Hawk, and Who's a Dove, at the Fed, ECB, BoE, and BoJ," by David Scutt. *Business Insider* March 29, 2017.

 http://markets.businessinsider.com/news/bonds/policy-hawk-and-dove-at-the-fed-ecb-boe-and-boj-2017-3-1001879905
- a. Make a list of the Fed officials named in the article. Which ones are doves? Which are hawks? Which central bank Bank of England, Fed, European Central Bank, or Bank of Japan is the most hawkish? The most dovish?
- b. What are the definitions of "inflation hawk" and "inflation dove"? Using the concept of the Taylor rule, describe the difference between an "inflation hawk" and an "inflation dove."
- c. Do you think the Fed should be aggressive in removing the monetary stimulus and raising interest rates? Or should the Fed move slowly? With your group members, discuss your answers.

- 27. "Federal Reserve Press Release: FOMC July 25-26,2017 Meeting." July 26, 2017. https://www.federalreserve.gov/monetarypolicy/files/monetary20170726a1.pdf
- a. What decision did the FOMC make at its July 25-26 meeting? What was their rationale?
- b. Go online to find the statement from the October 31/November 1 2017 FOMC meeting. (http://www.federalreserve.gov/monetarypolicy/fomccalendars.htm) What are the differences between the FOMC statements of July 2017 and October 2017?
- c. (As I write in August 2017...)

There is much speculation as to when the FOMC will next increase interest rates. Based on the July and October/November FOMC statements, what sort of economic indicators do members of the FOMC seem to be watching? What do you suppose needs to happen (or, what did happen) to those indicators before they decide to take action? What do you think the Fed will do next... and when?