

## E-Portfolio – Signature Assignment

*Salt Lake Community College  
Macroeconomics - Econ 2020  
Professor: Heather A Schumacker*

Please type your answers to the following questions. If you need to hand draw the graphs on page 3 you may and then scan them as a separate document. When you have completed this assignment post it to your e-portfolio along with your chosen article and 20 terms article write up. (20pts) Make sure to put an explanation of the assignments and a reflection statement on your ePortfolio web site. For examples of reflection prompts please see SLCC’s website: <https://www.slcc.edu/gened/eportfolio/docs/ReflectionHandout2.pdf>. (10 pts) Link your ePortfolio URL to your MyPage under the student tab so that instructors can view your work. (5pts)

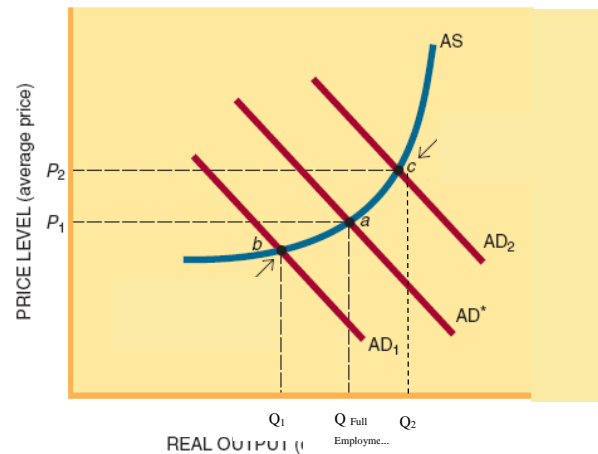
1. What are the 3 main macroeconomic goals economists would like to see for an economy: (3pts)
  1. **Economic growth**
  2. **Low unemployment**
  3. **Low inflation**
  
2. What is the formula for GDP (write out the full name)? Circle or highlight the largest component and fill in the chart. Under each put the components and something unique. (19pts)

**GDP = C (personal consumption expenditures) + Ig (gross private domestic investment) + G (government purchases) + X<sub>n</sub> (net exports)**

Components: Circle the largest sub-category	Components:	Components:	Components:
<b>1. durable goods</b> (life of 3+ years)	<b>1. all purchases of machinery, equipment and tools</b> (for business operations)	<b>1. government consumption expenditures</b> (consumed to provide public service)	<b>1. exports</b> (may contain goods/services consumed domestically)
<b>2. nondurable goods</b> (life of less than 3 years)	<b>2. all construction</b> (includes residential due to potential of rental income)	<b>2. government gross investment</b> ((public goods i.e. school/highway)	<b>2. imports</b> (foreign goods/services)
<b>3. services</b> (over 60% of consumption is included in here)	<b>3. changes in inventories</b> (capital goods)		
	<b>Excludes:</b> <b>1. stocks and bonds</b> (money supply)	<b>Excludes:</b> <b>1. government transfer payments</b> (reallocation of funds) <b>2. interest on national debt</b> (avg interest rate was 2.43% in 2013)	

3. What is the problem associated with being at  $AD_2$  that makes policy makers concerned? (1pt)

The increase of Aggregate Demand resulting in  $AD_2$  concerns the policy makers because it may cause an inflationary expenditure gap. This gap occurs when the aggregate expenditures at full-employment GDP is greater than what is necessary for full-employment GDP. Furthermore, it causes a demand-pull inflation.



4. Who does fiscal and monetary policy? What are 2 fiscal policies and 3 monetary policies to correct a situation where the economy is naturally at  $AD^*$  but finds itself at  $AD_2$ , as seen in the graph on the previous page. Briefly explain how each of these policies would work to correct the situation. (22pts)

Who does fiscal policy: **The Federal Government**

**1. Expansionary Fiscal Policy**

This policy consists of government spending increases, tax reductions, or a combination of both. In doing so, it increases the aggregate demand, which raises real GDP and decreases unemployment.

**2. Contractionary Fiscal Policy**

When faced with demand-pull inflation, this policy is used to move towards a government surplus by decreasing government spending, raising taxes, or a combination of both. Furthermore, it will decrease the aggregate demand, and although it reduces consumption, it will lessen the inflationary gap.

Who does monetary policy: **The Federal Reserve**

**1. Expansionary Monetary Policy**

This policy lowers interest rates to increase borrowing and spending to increase aggregate demand and expand real output, which raises real GDP to lower unemployment. Additionally, this policy can be enforced by lowering the reserve requirement, lowering the discount rate, or lowering the interest rate it pays on reserves to achieve the same goals.

**2. Restrictive Monetary Policy**

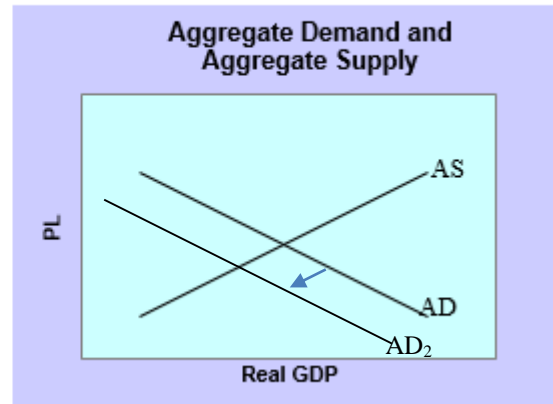
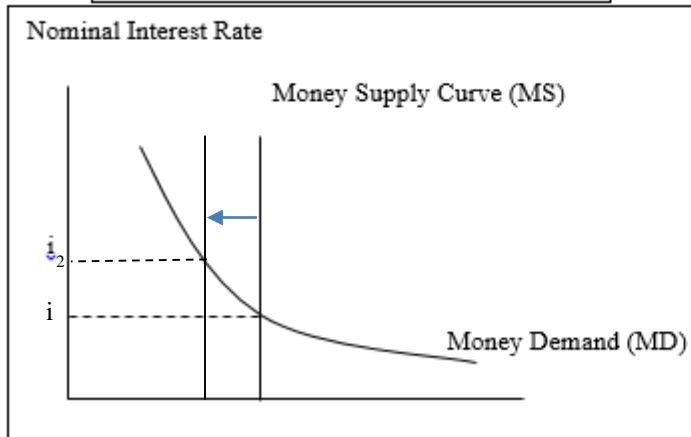
This policy increases the interest rate to reduce borrowing and spending. The Fed can either sell bonds to acquire the money in the bank reserves, raise the reserve requirement, raise the discount rate, or raise the interest rate on reserves. With that being said, this is done in efforts to decrease the supply of federal funds, raise the rates, and hold down price levels to reduce the inflationary gap.

**3. Discretionary Monetary Policy**

The monetary rule is supposed to stabilize the economy in response to the failures of the other monetary policies being enacted with poor judgement of the market. This is done so by a constant annual rate of increase in the money supply. Furthermore, it is to eliminate fluctuations in aggregate demand.

5. Begin in equilibrium in each of the following graphs; draw the effects from question 2 above as they would apply in each graph below. Next draw the effects of an anti-inflationary policy taken by the fed to correct the result from question 2 - use both graphs. Explain what is happening in each graph and overall in the economy as the due to the anti-inflationary policy. (20 pts)

Money Supply and Money Demand Graph



In response to the question 2's inflationary expenditure gap caused by the expansionary fiscal policy, the Fed would place in effect an anti-inflationary policy, such as the restrictive monetary policy. The Money Supply and Money Demand Graph shows is a result of the restrictive monetary policy that causes the money supply curve to decrease and raises the rates federal funds rate, which demand for banks to lend money; therefore, decreasing the money circulation. This policy is done through the Fed's selling bonds, in the money in the bank reserves, raise the reserve requirement, raise the discount rate, or raise the interest rate on reserves.

As the money supply decreases, the borrowing and spending will decrease. This is displayed in the Aggregate Demand and Aggregate Supply Graph, where aggregate demand has shifted left to AD<sub>2</sub> resulting in a decrease in the inflationary gap.

6. Given the situation our economy has been in the past several years why have fiscal and monetary policy had a difficult time getting us back to the optimal level of GDP. (5pts)

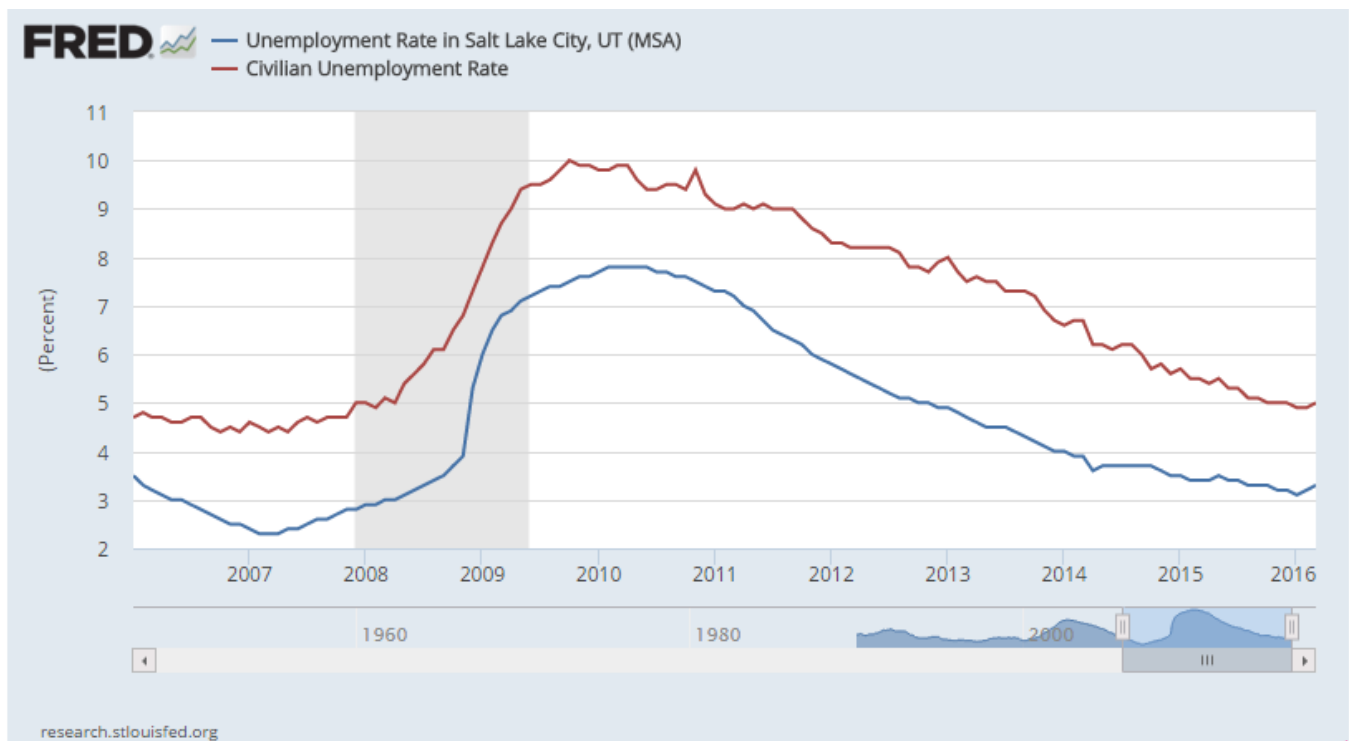
Although the we have had an expansionary monetary policy with the interest rates kept low and the consumption expenditures increasing, the fiscal policy has not propelled private investment. Part of fiscal policy has to do with taxation. With that being said, although the business taxes may not have increased, regulations such as the Affordable Healthcare Act, has deterred businesses to hire full-time employees due to the additional costs. Furthermore, imposing such burdens may decrease the demand for businesses to invest because the marginal benefit is not greater than or equal to the marginal cost.

FRED: Follow the instructions for this assignment on PDF handout.

Before you start, make sure to log in to your free account so that you can save your graphs!

FRED unemployment graph:

Watch the video “Introduction to FRED” and complete your own unemployment graph. Instead of using St. Louis use Salt Lake City. Have the graph span the last 10 years. Write about what inferences you can make from this graph. Save and paste the graph here: (5pts for the graph and 5 pts for write-up)



In analyzing this graph, there is a spike in unemployment rates in between 2008-2009. We know this was the recession and it is also signified as so with the gray area. The current unemployment rates are close to reaching its lows prior to the recession. However, our economy is has recovered to those times. From what it appears, it may be that our economy may have experienced a rightward shift in the aggregate demand, but the stagnating private investments (derived from the previous GDP graph) caused a leftward shift on the aggregate demand curve. Unemployment may be down, but real GDP is still low. Beyond that, I am not able to understand any more than that without having other information regarding fiscal policy and monetary policy.

7. List the 3 types of Unemployment, define each, and put a star next to those that are included in the natural rate of unemployment. (8pts)

1. **\*Frictional Unemployment**

**This accounts for workers that are “between jobs.” Whether it may be consisting of searching for a job or waiting to take a job in the near future, this is part of natural rate of unemployment.**

2. **\*Structural Unemployment**

**This occurs when there is a decline in demand for a certain skillset and an increase in demand for another skillset. These workers are unemployed until they adapt or acquire the skills that is in demand. This is also part of the natural rate of unemployment as the market continues to evolve and operate in the market system.**

3. **Cyclical Unemployment**

**This is caused when there is a decline in total spending. Typically during a recession, the aggregate demand decreases causing a shift to the left and increasing unemployment.**

8. What is the difference between nominal and real, why is each important? (4pts)

**Nominal is the amount being received and real is the value it can purchase other goods and services. This concept is important because there is a lag between real wage and nominal wage. Although real wage should equal nominal wage to catch up with inflation, that is not the case. Therefore, the nominal wage being earned is not being equated to the purchasing power it would have if real wage equals nominal wage.**

9. FRED Create a GDP graph following the instructions on the handout: (answers provided in billions)

Based on the graph, what is the Real Personal Consumption Expenditures for the second quarter of 2008?

10,077.9

Based on the graph, what is the Real Government Consumption Expenditures and Gross Investment amount for the second quarter of 2008?

2,974.981

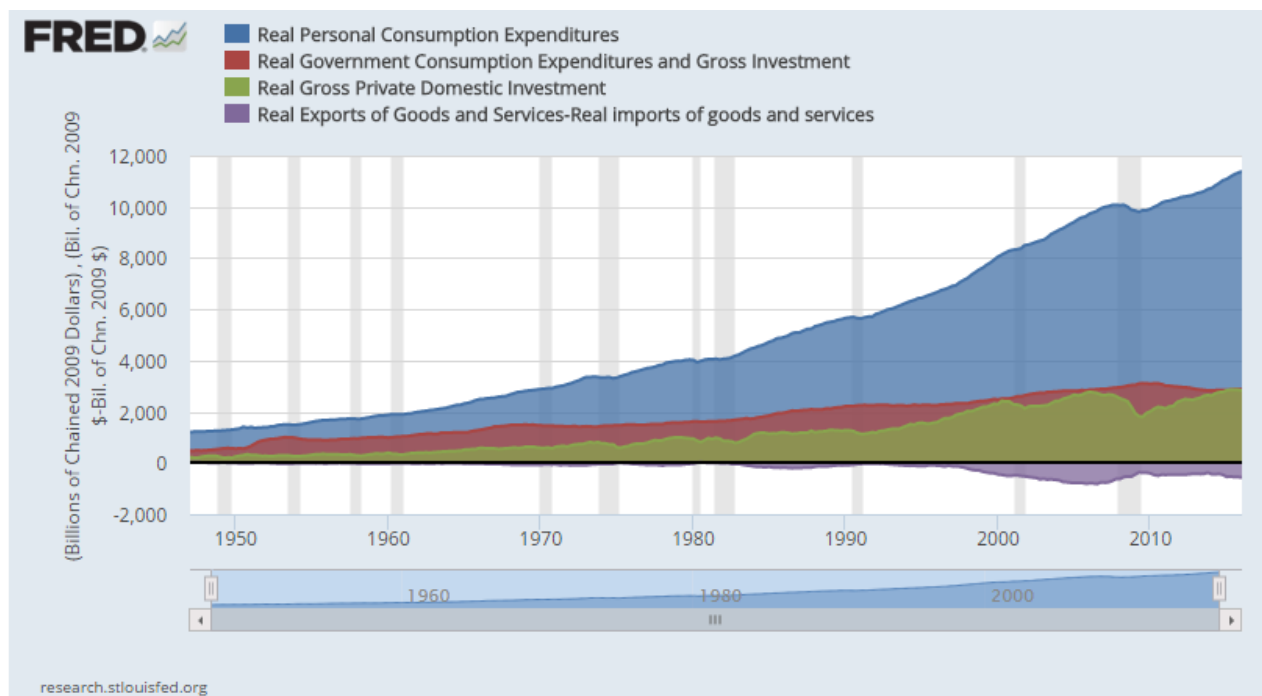
Based on the graph, what is the Real Gross Private Domestic Investment amount for the second quarter of 2008?

2,472.6

Based on the graph, what is the real net exports of goods and services amount for the second quarter of 2008? (4pts)

-550.4

10. Write about what inferences you can make from this graph. Save and paste the area graph here: (5pts for the graph and 5 pts for write-up)



As stated in the analysis from question 6, this graph shows that our real personal consumption expenditure has continued to increase and is not an issue, but rather the gross private domestic investment has not kept up with consumption. Real government consumption expenditure and gross investment appears to be stagnating as well. It may be helpful to our economy to increase in government spending since private investment is not gaining momentum. In addition to that, policies to encourage the economy to spend more money on domestic goods can help net exports. Although outsourcing provides the opportunity for us to experience lowered cost of goods, it also is taking away income that people can be receiving to pay for those low cost goods.

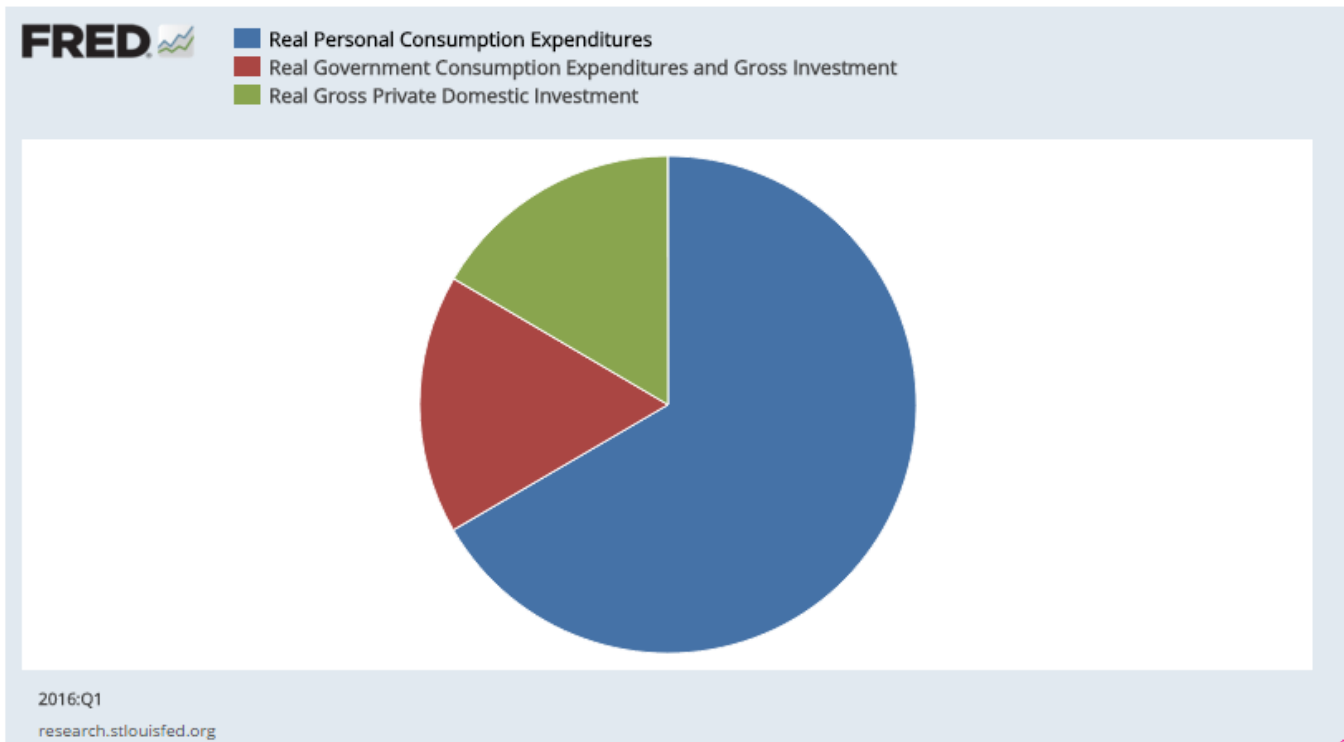
Change the graph type to a pie graph:

Put the cursor over the pie graph: What is the value of the current Real Personal Consumption Expenditures  in billions of chained 2009 dollars and what % of GDP is it

What is the value of the current Real Government Consumption Expenditures and Gross Investment  in billions of chained 2009 dollars and what % of GDP is it

What is the value of the current Real Gross Private Domestic Investment Expenditures  in billions of chained 2009 dollars and what % of GDP is it  (6pts)

Paste the pie graph here: (3 pts)



Use the excel sheets provided to complete this problem. Scenario 1: If the initial deposit into a bank is \$5,000 and the reserve requirement is 10% use formulas to fill in the chart all the way to completion (where there will be 0 for new deposits). Use formulas and cell references whenever possible. Fix the cell references for the reserve requirement when entering your formulas on the first line such that you can drag your information down the rows. Fixing a cell reference is done by putting dollar signs in front of the cell row and column references ex. \$B\$3 – this will mean that no matter where you copy that cell to it will always refer to cell B3. For scenario 2, change the reserve requirement to 40%. (20)

**Excel file attached separately**