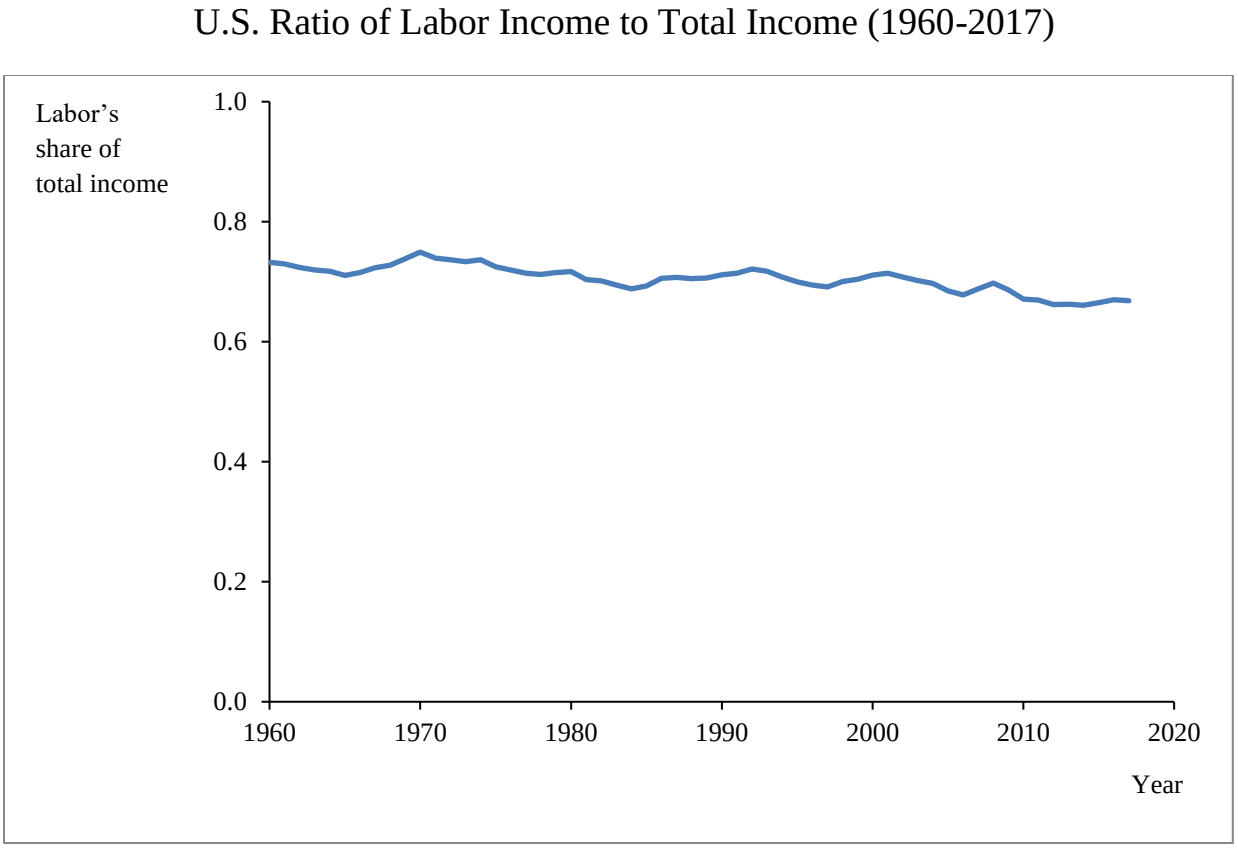
Macroeconomic Theory
Project # 5
April 4, 2018

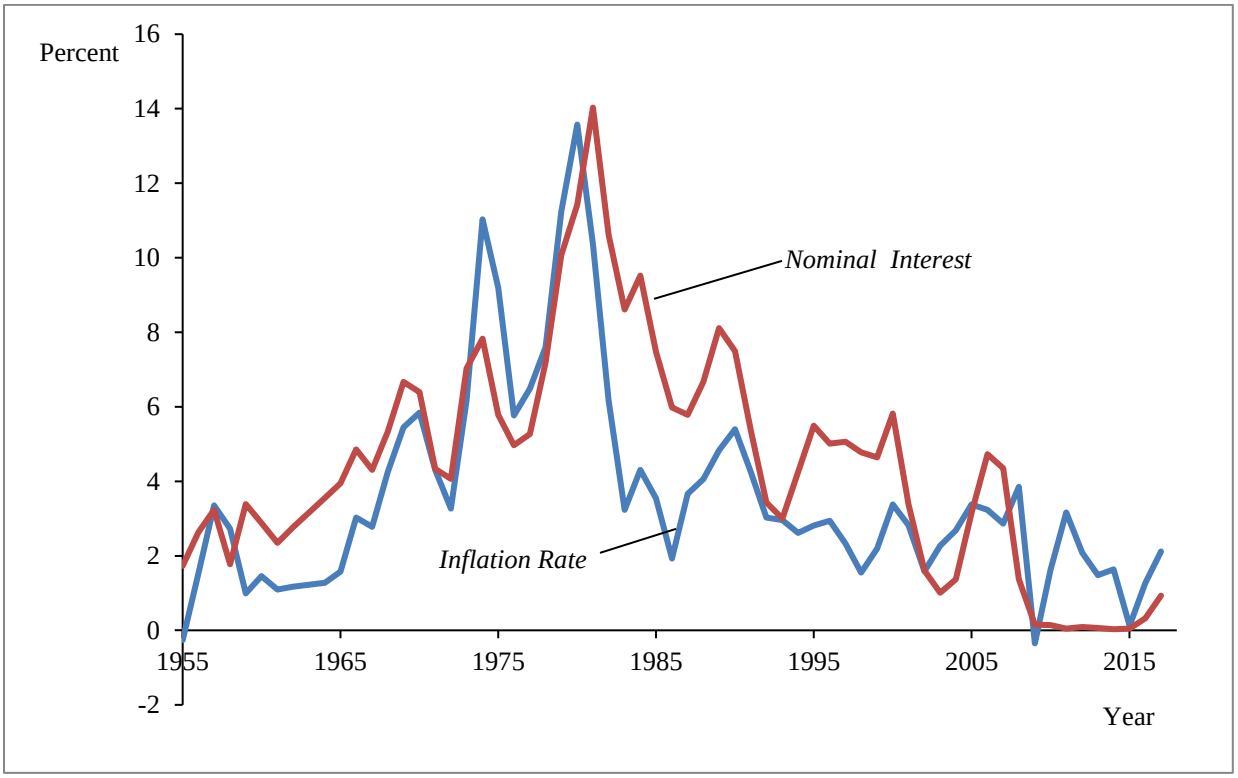
1. Recreate Figure 3-5 (pg. 61) for 1960-2017. Use annual data for your graph. You can find the necessary data at www.bea.gov in Table 1.12. Also, note that the formal name for depreciation is "consumption of fixed capital," which can be found in column 28 of Table 1.12. Calculate and report the mean ratio of labor income to total income for the years 1960-2017.



Mean Ratio of Labor to Total Income (1960-2017): 0.705

2. Recreate Figure 5-3 (pg. 116) for 1955-2017. Use a**nnual** data for your graph. Use the CPI inflation rate as the inflation rate (data available atwww.bls.gov) and the 3-month Treasury Bill: Secondary Market Rate (not seasonally adjusted) as your nominal interest rate. The Treasury Bill data is available using the FRED data tool available at http://research.stlouisfed.org/fred2/.

U.S Inflation and Nominal Interest Rates (1955-2017)



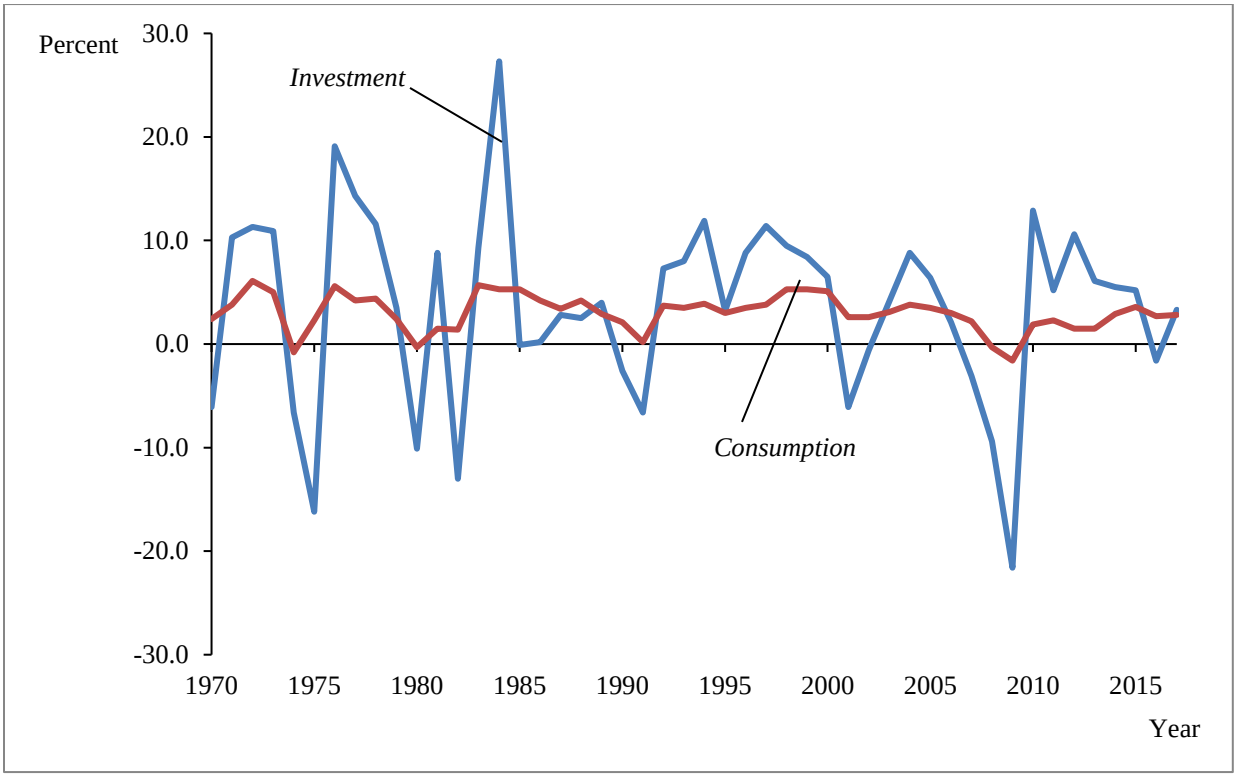
3. Recreate Table 8-1 (pg. 212) using 2016 data from the World Bank. Use the "GDP per capita, PPP (current international $) data, and list the countries in descending order of Income per Person. This may require you to put the countries in a different order than they are in Table 8-1.

International Differences in Standard of Living (2016)

Country	Income per person	Country	Income per person
United States	$57,638	Philippines	7,804
Japan	42,203	India	6,571
Russia	24,789	Nigeria	5,861
Mexico	17,275	Vietnam	5,236
China	15,529	Pakistan	5,236
Brazil	15,124	Bangladesh	3,580
Indonesia	11,609	Ethiopia	1,735

Data from: The World Bank. Data are 2016 GDP per capita, PPP (current international $).

4. Recreate Figure 10-2 (pg. 284), except put the growth in consumption and growth in investment on the same graph. Use **real and annual (NOT quarterly)** data for the years 1970-2017. You can find this data at www.bea.gov.



5. Recreate Figure 10-4 (pg. 286) with **annual** data points for 1949-2017. Include the trendline (with its equation) on your graph. The equation of this trendline represents the Okun's Law equation for the United States during this period. Use **seasonally adjusted** data. For the annual unemployment rate, you will need to take the mean of the 12 months of each year.