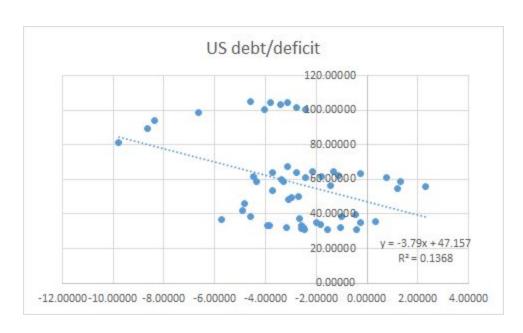
Dalton, Trey

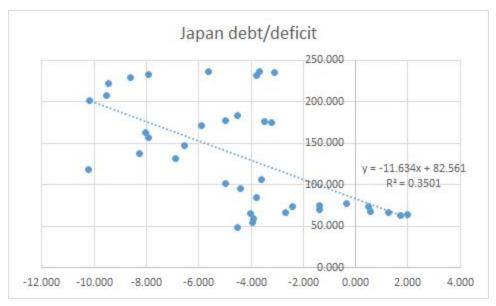
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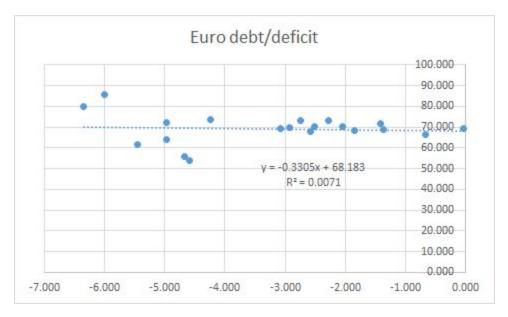
ECON-102-C

April 27th, 2020

Debt and Deficit







Based on the figures for each region, there seems to be varying levels of correlation between debt and deficits. For the United States, the R-squared value is low at about 0.14 and has a slope of -3.79. This means that each percent decrease in deficit, the debt level will decrease by 3.79 percent. The R-squared value being low indicates that the regression does not fit the data very well which means that our conclusions drawn from this regression line may not be entirely accurate to the data. On the other hand, the Euro area had almost no correlation with an R-squared of 0.0071. This indicates that the deficit has little effect on the debt level of these countries. Japan has the highest correlation and slope, with an R-squared of 0.35 and a slope of -11.63. This shows that a decreasing deficit by one percent causes a large decrease in the debt level of Japan. Debt is the accumulation of money owed due to the sum of deficits and surpluses in various years. Therefore, a surplus will subtract from the debt and a deficit will add more to the money owed to other countries. The United States often operates at a large deficit, thus increasing the debt over time. The United States is able to run this deficit because the growth rate of the real interest rate is usually higher than the cost of debt which makes the debt sustainable. This also shows that Japan has a lower overall debt because a change in one

years deficit has such a large impact on the overall debt level. Meanwhile, the Euro area has a very large debt because one year has such a little impact.