

### Exercise Three: The Real Rate of Interest

In this exercise, students will work in groups to answer several important questions about the real rate of interest. Groups will present their reports in class on Tuesday, October 19. Each group must also prepare a one page report that summarizes their answers. Please bring 20 copies of the report to class on October 19 or send the report to Michael Salemi by 4:00 p.m. on Monday, October 18 so that he can make copies. Individuals are on their honor to affix their names to their team report only if they **participated substantially** in the work necessary to complete the report.

#### Group 1: Conner, Emmanuel, Stephen, Doug

Many economists, including Nobel Laureate Paul Samuelson, argue that Irving Fisher's theory of interest amounts to saying that the real rate of interest depends on the productivity of an economy and the patience of its people. Explain why, according to Fisher, the interest rate depends on these two factors. Explain what Fisher predicts would happen to the real rate if a nation experience an "increase in productivity" or an "increase in patience." Cite evidence from *Theory of Interest* to support your views. Explain whether, how, and why Fisher's view is relevant in today's economy.

#### Group 2: Olga, Alex, Ann, Tim, Dan

What are the important connections between the ideas expressed by Adam Smith in Chapters V-VII of the *Wealth of Nations* and by Irving Fisher in Chapters 2-5 of the *Theory of Interest*? For example, what role would Smith say the real rate of interest plays in the "natural price of a commodity"? What would Fisher say about the connection between these two concepts?

#### Group 3: Kellie, Lotte, Vivek, Avery, Cassie

Go to Fred, at the St. Louis Federal Reserve Bank web site, and download data for one year Treasury Bond yields and the consumer price index. Use the data for the consumer price index to create a measure of the rate of inflation. Use the data on nominal interest rates and inflation to create a measure of the real rate of interest between 1960 and the present. Graph the real rate of interest and point out the important features of the graph. (The team may ask Salemi for help getting the data and thinking through how to construct the required estimates).

#### Group 4: Lindsey, Meghan, Sean, Maribeth, Chris

Thomas Aquinas: "Interest is morally wrong because it is payment for time which is God's alone to give and take away."

Irving Fisher: "Lighten up Tom. No law, moral or of any other sort, can eradicate the collection of interest."

Explain why Thomas Aquinas and Irving Fisher take that positions that they do. Give an example of a widely practiced religion that forbids payment of interest. Explain the origin of the prohibition and how practitioners of the religion cope with the restriction.