FOMC Challenge:
A Project Approach to Policy Instruction in Economics

Lesson Author

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Standards and Benchmarks (see pages 15-17)

Description and Background

FOMC Challenge, a classroom application of the Fed Challenge competition, is designed to be a project-based capstone experience completed by students at the conclusion of their Advanced Placement® (AP) Macroeconomic course. Students are divided into project teams. They conduct research on the state of the economy using economic data available through the Federal Reserve Bank of St. Louis FRED® (Federal Reserve Economic Data) website to answer this question: At what rate should the Federal Open Market Committee (FOMC) target the federal funds rate during its (month and date) meeting and why?

The teams then present and defend their conclusions and federal funds rate policy proposals to a panel of independent judges.

Students should have covered about 75 percent of the course content before beginning this project. It is important that they understand the basics of gross domestic product (GDP), unemployment, inflation, circular flow, aggregate supply, and aggregate demand. Before the beginning of the project it will be helpful, but not necessary, to have assigned students FRED® learning modules (at https://www.stlouisfed.org/education/tools-for-teaching-with-fred) so they become familiar with how to use FRED®. It is recommended that the project be introduced at least one month prior to the presentation day to give students time to conduct research, comprehend real data, and develop a supportable position regarding the federal funds rate.

NOTE: These materials assume a block schedule. Teachers will need to modify aspects of this activity to fit a traditional schedule.

Grade Level

11-12

Time Required

Assuming a block schedule with 90 minutes per class period, a minimum of 4.5 class periods or an equivalent amount of class time is needed as follows:

- ***Develop Presentations.*** One session is needed to create the teams, explain the project, and give the due date. After that, teachers may schedule class time as it fits their needs, with a minimum equivalent of two class periods for teams to work. Additionally, it is advisable to have extra class time allotted during the project for teams to discuss their work with the teacher and receive feedback.
- ***Presentations.*** One class period is needed, ideally shortly before an FOMC meeting.
- ***Closure.*** 40 minutes

Compelling Question

At what rate should the FOMC target the federal funds rate at its (month and date) meeting and why?

Objectives/Learning Targets

Students will be able to

- access and productively use FRED®,
- analyze and evaluate multiple measures of economic performance,
- explain how the measures of economic performance are interrelated in the short run and long run,
- explain the role of the Federal Reserve in monetary policy,
- develop and defend a federal funds rate target based on the analysis of real economic data, and
- formulate successful team strategies.

Content and Skills

- Analyzing measures of macroeconomic performance (unemployment, inflation, real GDP, and others students choose to use)
- Forecasting from data
- Accessing and using FRED®
- Teamwork
- Leadership
- Problem solving

Requirements for Final Presentations

- Presentation space (a classroom would work, but a more formal conference room would be better)
- Internet access
- Computers with presentation software (MS Word and/or Google Docs)
- Ability to project computer-generated images
- A device for keeping time
- At least three judges (some external to the school)

Materials Included in This Lesson

Recommended Links

https://fred.stlouisfed.org/

https://www.stlouisfed.org/education/tools-for-teaching-with-fred

https://www.stlouisfed.org/publications

https://www.newyorkfed.org/outreach-and-education/high-school/high-school-fed-challenge-resource.html

https://www.stlouisfed.org/education

https://www.federalreserve.gov/monetarypolicy/fomccalendars.htm

https://www.federalreserve.gov/monetarypolicy.htm

DEVELOP PRESENTATIONS

Materials

- *Scoring Rubric*, one copy for each student

Procedure

Introduction and Team Forming

1. Introduce the activity by reading with the students the most recent press release from the Federal Open Market Committee (FOMC) at https://www.federalreserve.gov/newsevents/pressreleases.htm. Discuss the memo along the following lines:
   - What is the federal funds rate policy established during this meeting?
   - What factors did the FOMC consider as potentially supporting short- and long-run economic growth?
   - What factors did the FOMC consider as potential obstacles to short- and long-run economic growth?
   - Was there division within the FOMC regarding the vote? Why or why not?

2. Inform the students that they will be completing a project in which they will serve as members of the FOMC as follows:
   a. They will work in teams to develop, present, and defend a federal funds rate policy based on real economic data to answer this challenge question:

      At what rate should the FOMC target the federal funds rate during its (month and date) meeting and why?

      (**NOTE:** As mentioned above, you are encouraged to choose a presentation date that is shortly before an FOMC meeting.)

   b. The teams will give their presentations to a panel of judges. Each presentation may last up to 7 minutes and will be followed by up to 7 minutes of questioning by the judges.

   c. The teams must use real, cited economic data as the basis of their presentations, with an emphasis on risks and challenges (inflation, unemployment, GDP, etc.). The policy presented—the key point—must be supported by the evidence presented.

3. Form the teams and then distribute and review the *Scoring Rubric*. (It is best to try and balance the number of team members across teams, with a minimum of three and maximum of six students per team. For example, for a class of 25 students, form five teams with five students per team.)

Team Research/Teacher Coaching

4. Students are to work within their teams to conduct research and prepare their presentations. The teacher's role is to coach—that is, to answer questions, provide guidance as teams build their arguments, and help the teams stay on schedule. Schedule time for teams to complete each of the following:
    a. Develop leadership roles, tasks, and a schedule.
    b. Conduct research using Federal Reserve resources (see the "Recommended Links" section).
    c. Meet with the teacher to accomplish the following:
        i. Troubleshoot ideas.
        ii. Discuss team dynamics, successes, and failures.
        iii. Seek coaching assistance.
        iv. Discuss first impressions and how to professionally engage the judges.
        v. Discuss the schedule to make sure the team is on track.
    d. Collaboratively develop the presentation:
        i. Write the script and prepare the visuals.
        ii. Determine which team member will present each section of the presentation.
        iii. Practice the presentation.
        iv. Think about questions the judges might ask and possible responses to those questions.
        v. Receive feedback from the teacher.

PRESENTATIONS

Preparation

1. About a month in advance, contact and schedule judges (at least three) for the presentation day (see the *Invitation Letter to Judges*).

2. Schedule a presentation space that is not comfortable for the students. A conference room, where students sit at a meeting table across from judges for the presentations, would work well.

3. Create the presentation schedule (see the *Sample Competition Schedule*). (**NOTE:** You may want the teams to randomly draw their presentation times at least one week before the presentations.)

4. Prepare an information packet for *each* judge with the following handouts to distribute on presentation day:
    a. *Schedule*
    b. *Competition Rules and Judge Guidelines*
    c. *Scoring Rubric*, one for each team
    d. *Judge's Evaluation Form*, one for each team
    e. *Sample Judges' Questions*

5. Select and test a timing device for use at the competition.

Procedure

1. Meet with the judges, distribute the information packets, and review each handout in turn:
    a. *Schedule*
    b. *Competition Rules and Judge Guidelines*
    c. *Scoring Rubric*
    d. *Judge's Evaluation Form*
    e. *Sample Judges' Questions*. Encourage the judges to also ask their own questions specific to each presentation.

2. Give the judges the *Master Score Sheet*.

3. Have the judges select a time keeper and give that person the timing device.

4. Have students present according to the developed schedule.

5. Collect the *Judge's Evaluation Forms* and *Scoring Rubrics* and tally final scores on the *Master Score Sheet*.

6. Announce the winning team—the team with the highest score overall wins.

CLOSURE

Procedure

1. Celebrate the activity and recognize the winning team.

2. Share the completed *Judge's Evaluation Forms* and *Scoring Rubrics* with the teams.

3. Meet with each team for post-presentation reflection.

4. Read and discuss the minutes of the FOMC meeting that follows the presentation day to compare the policy the FOMC developed with the policy the students proposed.

Assessment

5. Choose from among the following options to assign a grade for the project:
    a. Assign each team member the grade that was earned during the presentation based on total points or an average of the judges' scores.
    b. Reward completion points for each successfully completed class session.
    c. Have each student write a reflective paper about one of the following:
        i. The federal funds rate
        ii. Team dynamics
        iii. What went well in their presentation or what could have be improved

FOMC Challenge: Scoring Rubric	Team:				Total Score:
Points	**Category 1: Knowledge of the Fed, current state of the economy, and monetary policy**	**Category 2: Response to judges' questions**	**Category 3: Quality of the presentation**	**Category 4: Research and analysis**	**Category 5: Teamwork and cooperation**
10	• Always presents accurate information and demonstrates a thorough understanding of basic and advanced concepts.	• Always answers to the point and shows poise under pressure. • Always demonstrates the ability to think quickly. • Extremely persuasive in defending positions that are challenged.	• Extremely persuasive in advocacy role. • Always demonstrates logical and coherent organization. • Each student speaks with great confidence and sufficient volume. • Always integrates audio-visual aids appropriately. • Students never read from notes/script.	• Conclusions drawn from data are always logical and insightful. • Recommendations are always supported by relevant data. • A wide variety of authoritative sources are used.	• Each team member plays a substantial role. • Each team member demonstrates extensive evidence of coordination among team members.
8-9	• Consistently presents accurate information and demonstrates a thorough understanding of basic concepts.	• Consistently answers to the point and shows poise under pressure. • Consistently demonstrates the ability to think quickly. • Convincingly defends positions that are challenged.	• Persuasive in advocacy role. • Consistently demonstrates logical and coherent organization. • Most students speak with confidence and sufficient volume. • Consistently integrates audio-visual aids appropriately. • Students rarely read from notes/script.	• Conclusions drawn from data are consistently logical and insightful. • Recommendations are consistently supported by relevant data. • Mostly authoritative sources are used.	• Although some team members play a greater role than others, each team member contributes significantly. • There is significant evidence of coordination among team members.
5-7	• Frequently presents accurate information and demonstrates average understanding of basic concepts.	• Frequently answers to the point and shows poise under pressure. • Frequently demonstrates the ability to think quickly. • Adequately defends positions that are challenged.	• Frequently persuasive in advocacy role. • Frequently demonstrates logical and coherent organization. • Some students speak with confidence and sufficient volume. • Frequently integrates audio-visual aids appropriately. • Students occasionally read from notes/script.	• Conclusions drawn from data are frequently logical and insightful. • Recommendations are frequently supported by relevant data. • Some authoritative sources are used.	• Some team members dominate, while others contribute to varying degrees. • There is some evidence of coordination among team members.
3-4	• Mixes accurate and inaccurate information and demonstrates less-than-average understanding of basic concepts.	• Occasionally answers to the point and shows poise under pressure. • Occasionally demonstrates the ability to think quickly. • Less than adequately defends positions that are challenged.	• Occasionally persuasive in advocacy role. • Occasionally demonstrates logical and coherent organization. • Few students speak with confidence and sufficient volume. • Occasionally integrates audio-visual aids appropriately. • Students frequently read from notes/script.	• Conclusions drawn from data are occasionally logical and insightful. • Recommendations are occasionally supported by relevant data. • Few authoritative sources are used.	• Some team members dominate, while others make modest contributions. • There is little evidence of coordination among team members.
1-2	• Provides little accurate information and demonstrates poor understanding of basic concepts.	• Rarely answers to the point or shows poise under pressure. • Rarely demonstrates the ability to think quickly. • Poorly defends positions that are challenged.	• Rarely persuasive in advocacy role. • Rarely demonstrates logical and coherent organization. • Students speak with minimal confidence and are difficult to hear. • Rarely integrates audio-visual aids. • Students depend heavily on notes/script.	• Conclusions drawn from data lack logic and insight. • Recommendations are rarely supported by relevant data. • Authoritative sources are ignored.	• One or two team members dominate, while others contribute negligibly. • There is insignificant evidence of coordination among team members.
Score					

Sample Competition Schedule

Team 1	**8:00**	**8:14**	**14 minutes**
Presentation	8:00	8:07	7 minutes
Questions	8:07	8:14	7 minutes
Score Team 1	**8:14**	**8:17**	**3 minutes**
Team 2	**8:17**	**8:31**	**14 minutes**
Presentation	8:17	8:24	7 minutes
Questions	8:24	8:31	7 minutes
Score Team 2	**8:31**	**8:34**	**3 minutes**
Team 3	**8:34**	**8:48**	**14 minutes**
Presentation	8:34	8:41	7 minutes
Questions	8:41	8:48	7 minutes
Score Team 3	**8:48**	**8:51**	**3 minutes**
Team 4	**8:51**	**9:05**	**14 minutes**
Presentation	8:51	8:58	7 minutes
Questions	8:58	9:05	7 minutes
Score Team 4	**9:05**	**9:08**	**3 minutes**
Team 5	**9:08**	**9:22**	**14 minutes**
Presentation	9:08	9:15	7 minutes
Questions	9:15	9:22	7 minutes
Score Team 5	**9:22**	**9:25**	**3 minutes**
Add scores/ Announce winning team	**9:25**	**9:30**	**5 minutes**

Invitation Letter to Judges

{Insert date}

Dear **{Insert name}**,

I am writing to invite you to serve as a judge as part of the FOMC (Federal Open Market Committee) Challenge Competition at **{Insert name of high school}**. The FOMC Challenge is a highly enriching educational activity that enables students in Advanced Placement® Macroeconomics to apply knowledge and skills they have learned in a judged competition. For the contest to be a success, I need your help. Specifically, I would like you to serve as one of at least three judges. Ideally, each judge will have some knowledge regarding the U.S. Federal Reserve System and its role in conducting monetary policy (although this knowledge is not mandatory to serve as a judge).

The FOMC Challenge requires students to work in teams to simulate a meeting of the FOMC, a policymaking body of the Federal Reserve System. The competition will include two parts to each team's turn: a 7-minute presentation followed by 7 minutes to answer judges' questions. Each presentation is to explore the current condition of the economy, with an emphasis on risks and challenges (inflation, unemployment, GDP, etc.), and state a policy direction for the federal funds rate. This policy—the key point—must be supported by the evidence presented. The judges' questions are to test the team's knowledge of the Federal Reserve, the impact of the team's policy decision, and macroeconomics in general. Each team will receive a team score based on set criteria. The team with the highest total score will be declared the winner.

The competition will be held as follows:

Day of the week	Date	Time	Location

You would need to arrive at least 10-15 minutes ahead of the listed time for brief directions and to receive and review the judging materials before the competition begins. The materials will include the schedule of presentations, rules and guidelines, scoring rubric, and judge's evaluation forms.

Thank you for taking the time to consider serving as a judge for our FOMC Challenge. I know the students and I will appreciate your time and effort if you are able to serve. I look forward to hearing back from you soon.

Sincerely,

{Insert teacher name}

{Insert teacher contact information}

Judge's Evaluation Form

Team: _____

Topic	Comments
Data presented (graphs, charts, etc.)	
Policy recommendation (federal funds rate)	
Judges' questions	
• **How well did the team's policy recommendation match the economic outlook they presented?** • **Did the team provide support for their proposal?** • **Was there evidence of research and fundamental understanding of the data presented?**	

Competition Rules and Judge Guidelines

Competition Rules

1. Students will compete in teams to answer this question:

   At what rate should the FOMC set the federal funds rate during its (month and date) meeting and why?

2. Each team will present to a panel of at least three judges who will follow the *Judge Guidelines* below and score each team.
3. Each team's turn will include two parts as follows:
   a. Team presentation: **7 minutes maximum**
   b. Questioning by the judges: **7 minutes maximum**
4. The team with the highest total points wins.

Judge Guidelines

1. One of the judges must be the time keeper. The time requirements (noted above) *must be strictly followed*.
2. During each presentation, each judge is to individually take notes on the provided *Judge's Evaluation Form*.
3. Judges may not ask questions during the 7-minute presentations.
4. Judges may ask questions only during the 7 minutes allotted for this purpose. The questions are to test the depth of the team's knowledge and should cover these three areas:
   a. Content or logic of the team's presentation
   b. The Federal Reserve and its role in the economy
   c. Topics known to the judges and related to the team's presentation

   Please feel free to push the envelope some to really grasp their depth of knowledge.
5. At the conclusion of each team's turn, the judges are to complete the following in 3 minutes:
   a. Discuss among themselves the quality of the presentation and the answers provided.
   b. Each independently score the team using the *Scoring Rubric* as follows:
      i. Score each category from 1 to 10.
      ii. Total the team score (sum the category scores), which will range from 5 to 50.
      iii. Record the team score on the *Master Score Sheet*.

Additional Notes

Since the competition is to take place in one 90-minute block period, it is imperative for groups to start within 3 minutes of the conclusion of the previous group's presentation.

The *Judge's Evaluation Forms* and *Scoring Rubrics* will be given to the teams after the competition to allow them to evaluate their strengths and weaknesses. This should generate some good, content-based conversation/reflection among and between teams.

Thanks again for judging today!

Master Score Sheet

Date:_____

	Total Team Score (Sum of judges' scores)
Team 1: _____	_____
Team 2: _____	_____
Team 3: _____	_____
Team 4: _____	_____
Team 5: _____	_____

Sample Judges' Questions

- Some politicians have called for the elimination of the Federal Reserve System. To what extent do you believe this is a good idea?
- During the last several years, bills have been submitted to Congress that would subject monetary policy to direct congressional oversight. What, if any, are the possible implications of such a proposal?
- Should the Federal Reserve worry about trade deficits?
- Does the Federal Reserve have any control over unemployment? In other words, can it really be responsible for job growth?
- Is deflation worse than inflation?
- What should the main objective of the FOMC be when it sets monetary policy?
- How does the Federal Reserve actually raise and lower the federal funds rate?
- In your own words, explain the Phillips curve. What is it, and what does it show? Is there any justification to question its validity?
- If the Federal Reserve could achieve 0.5 percent less unemployment by accepting another 1 percent of inflation, would that be a good thing?
- What should the U.S. unemployment goal be? Why?
- On the fiscal policy side, do you think balancing the federal budget is an important goal?
- Who is the current Chair of the Federal Reserve?
- How many Districts are there in the Federal Reserve?
- To what extent is the Federal Reserve a public entity and to what extent is it a private entity?

Standards and Benchmarks

AP Macroeconomics Curriculum Alignment

As a capstone experience, this project requires students to access and apply knowledge and skills from the AP Course Description. Listed below are the primary curriculum components, taken from the AP Placement Course Description Topics, fulfilled by this project.

Topic: Basic Economic Concepts

- The course should also introduce the concept of the business cycle to give students an overview of economic fluctuations and to highlight the dynamics of unemployment, inflation, and economic growth.

Topic: Measurement of Economic Performance

- In studying the concept of gross domestic product, it is also important that students learn how gross domestic product is measured, have a clear understanding of its components, and be able to distinguish between real and nominal gross domestic product.
- The course should examine the nature and causes of unemployment, costs of unemployment, and how the unemployment rate is measured.

Topic: National Income and Price Determination

- Students should be able to use the aggregate demand and aggregate supply model to determine equilibrium income and price level and to analyze the impact of economic fluctuations on the economy's output and price level, both in the short run and the long run.

Topic: Financial Sector

- The course should proceed to investigate how equilibrium in the money market determines the equilibrium nominal interest rate.
- Students should establish the link between changes in the real interest rate and changes in aggregate demand and understand how changes in aggregate demand affect real output and price level.

Topic: Stabilization Policies

- Students should learn to analyze the impacts of fiscal and monetary policy on aggregate demand and on aggregate supply.
- The course should distinguish between short-run and long-run impacts of monetary and fiscal policies.
- A well rounded course also includes an examination of the significance of expectations, including inflationary expectations.

Topic: Economic Growth

- Students should understand the role of productivity in raising real output…and the role of investment in human capital formation and physical capital accumulation.
- Students should examine how public policies influence the long-run economic growth of an economy.

Topic: Open Economy—International Trade and Finance

- It is important to examine…how domestic policy actions affect international finance and trade.

National Voluntary Standards in Economics

Standard 18: Economic Fluctuations

Fluctuations in a nation's overall levels of income, employment, and prices are determined by the interaction of spending and production decisions made by all households, firms, government agencies, and others in the economy. Recessions occur when overall levels of income and employment decline.

- **Grade 8 Benchmarks**

  1. GDP is a measure of a country's economic output and income. It is the total market value, measured in dollars, of all final goods and services produced in the economy in one year.

- **Grade 12 Benchmarks**

  1. An increase in nominal GDP may reflect increases in the production of goods and services and also increases in prices. GDP adjusted for price changes is "real GDP." Real GDP per capita is a basis for comparing material living standards over time and among different countries.
  2. The potential level of real GDP for a nation is determined by such things as the size and skills of its labor force, the size and quality of its stock of capital goods, the quantity and quality of its natural resources, its technological capabilities, and its legal and cultural institutions.
  3. A business cycle involves fluctuations of real GDP around its potential level.

Standard 19: Unemployment and Inflation

Unemployment imposes costs on individuals and the overall economy. Inflation, both expected and unexpected, also imposes costs on individuals and the overall economy. Unemployment increases during recessions and decreases during recoveries.

- **Grade 8 Benchmarks**

  1. To be counted as unemployed, a person must be in the labor force. The labor force consists of people age 16 and over who are employed or actively seeking work. Thus the labor force is the sum of total employment and total unemployment.
  2. The unemployment rate is the percentage of the labor force that is willing and able to work, does not currently have a job, and is actively looking for work.

- **Grade 12 Benchmarks**

  1. The unemployment rate is an imperfect measure of unemployment because, among other reasons, it does not: (1) include workers whose job prospects are so poor that they become discouraged from seeking jobs and leave the labor force, and (2) reflect part-time workers who are looking for full-time work.
  2. Unemployment rates differ for people of different ages, races, and sexes. This reflects differences in work experience, education, training, and skills, as well as discrimination.

3. Unemployment can be caused by people changing jobs, by seasonal fluctuations in demand, by changes in the skills needed by employers, or by cyclical fluctuations in the level of national spending.
4. Same people are unemployed even when the economy is said to be functioning at full employment.
5. Changes in total employment are an important indicator of economic performance and influence levels of real GDP.
6. Unexpected inflation imposes costs on many people and benefits others because it arbitrarily redistributes purchasing power among different groups of people. Unexpected inflation hurts savers and people on fixed incomes; it helps people who have borrowed money at a fixed rate of interest.
7. Inflation can reduce the rate of growth of national living standards because individuals and organizations use resources to protect themselves against the uncertainty of future prices.

Standard 20: Fiscal and Monetary Policy

Federal government budgetary policy and the Federal Reserve System's monetary policy influence the overall levels of employment, output, and prices.

- **Grade 12 Benchmarks**

7. Monetary policies are decisions by the Federal Reserve System that lead to changes in the supply of money, short-term interest rates, and the availability of credit. Changes in the growth rate of the money supply can influence overall levels of spending, employment, and prices in the economy by inducing changes in the levels of personal and business investment spending.
8. The Federal Reserve System's major monetary policy tool is open market purchases or sales of government securities, which affects the money supply and short-term interest rates. Other policy tools used by the Federal Reserve System include making loans to banks (and charging a rate of interest called the discount rate). In emergency situations, the Federal Reserve may make loans to other institutions. The Federal Reserve can also influence monetary conditions by changing depository institutions' reserve requirements.
9. The Federal Reserve targets the level of the federal funds rate, a short-term rate that banks charge one another for the use of excess funds. This target is largely reached by buying and selling existing government securities.
10. The Federal Reserve tends to increase interest rate targets when it feels the economy is growing too rapidly and/or the inflation rate is accelerating. It tends to lower rate targets when it wants to stimulate the short-term growth of the economy.