

Using Infographics to Visualize Macroeconomic Data: AD-AS Model

Sherilyn Narker
Economics and Financial Education Specialist
Federal Reserve Bank of Atlanta

Lesson description

In this lesson, students will review content associated with the aggregate demand-aggregate supply (AD-AS) model through participation in a card-matching game. They will move around the room looking for the persons who have the economic concepts associated with the descriptions on their cards. After reviewing, students will work in groups or independently to create an infographic for key macroeconomic concepts and data associated with the model.

Concepts

- Aggregate demand
- Short-run aggregate supply
- Price level
- Real gross domestic product

Objectives

Students will

- Define key terms such as aggregate demand, short-run aggregate supply, price level, and real gross domestic product.
- Explain the AD-AS model and factors affecting the model.
- Analyze an infographic and discuss key elements.
- Illustrate key ideas about the AD-AS model in the form of an infographic.

Related content areas

Economics, AP macroeconomics

Time required

At least one 55-minute class period. (You may consider allowing students to finish their designs for homework.)

Materials

Computer/Tablet

Internet access

PowerPoint slides (Using Infographics to Visualize Macroeconomic Data)

Handout #1: AD-AS Model Cards

Handout #2: AD-AS Model Concept Summary

Handout #3: Infographic Rubric

Handout #4: Registration Instructions for Piktochart

Handout #5: Resource Links

Visual #1: Card Sort Signs

Visual #2: Arts & Economics infographic (<https://www.frbatlanta.org/education/publications/extra-credit/2015/spring/infographic/arts-and-economics.aspx>) or other Piktochart-created infographic to discuss

Preparation

1. You will need computer and Internet access to complete this lesson during class time. If you need to sign up for a computer lab or request a laptop or tablet cart, please do so before you conduct this lesson.
2. Before the lesson, print one copy of Handout #1 and cut apart the cards so that you have enough to give one to each student. There are 40 cards altogether, so most classes will not need all of them. Choose the concepts you think your students need to review most. If you would like to use the cards again, laminate them before you cut them apart.
3. Before class on the day of the lesson, post the three signs from Visual #1: Card Sort Signs on your wall. Space the signs far enough apart to allow a third of your students to cluster under each one.

Procedures

(Instructions for the PowerPoint slides appear in italics. Content background appears in regular type.)

1. *Open the PowerPoint presentation and display the title slide (1).*
2. *Display slide 2. Identify the standards and elements addressed in the lesson.*
3. *Display slide 3. Explain the objectives you expect to accomplish during the lesson.*
4. Introduce the lesson by telling the students they are going to participate in an activity to review the aggregate demand and aggregate supply model. Explain that, after a brief review, they will use the material about the model to produce a piece of art about the topic.
5. *Display slide 5. Tell the students that they will each receive a card, and the card will have either a concept or an explanation. After all students have received a card, the teacher will say "Go," and students move around the room looking for the person with the matching card—*

explanation to concept, and vice versa. As students identify matches, they should stand in one place with their partners.

6. *Display slide 6.* Tell students to look around the room and identify where you have placed the signs shown on the slide. With their partners, ask the students to discuss which category describes their concept, and to then go stand under that sign. When all the students are in place, begin with the *graph* group and ask the students to share their concept and description. After everyone in that group shares, ask the other two groups if anyone should move from under that sign. If all students are correctly placed, move on to the *determinants of aggregate demand*. If some of the students must move, ask them to go to the correct category. Continue this process until all three groups have shared.
7. *Display slide 7.* Reinforce the concepts by showing them sorted into the correct categories on this slide. Ask students to return to their seats.
8. *Display slide 8.* Tell the students they are about to get an assignment. Ask the students, “Which set of instructions would you prefer to follow?” Most students are likely to say the set on the right. Ask them to explain why. Some possible responses include: pictures, clear path from start to finish, concise steps, etc. A few students may say the set on the left. They may indicate that the one on the left is likely to have more details and will give more information about each step. Tell students that their notes on aggregate demand and aggregate supply may be similar to the document on their left. However, you want to see if they can take this information and make it more easily understood by creating a product more like the document on their right.
9. *Display slide 9.* Tell students that the instructions on the right are shown as an “infographic.” Ask a student to read out loud the definition of infographic on slide 8. Emphasize the benefits of using infographics that are listed at the bottom of the slide. Tell students that they are going to create their own infographics for the AD-AS model.
10. *Display slide 10.* If you have a copy, hold up the Arts & Economics infographic produced by the Federal Reserve Bank of Atlanta. Tell students that this infographic was designed using a free online program called Piktochart. (You could also use a sample template from Piktochart for your explanation.) Explain that the students will be using Piktochart to create their own infographics. Tell the students that you are going to take them through some of the sections of the Arts & Economics infographic to point out features of infographics and how the program was used to create them. Tell the students that the section on the slide is the title block. Explain that Piktochart infographics are designed block by block. Ask the students, “What features are part of this title block?” They will point out the title, the subtitle, color scheme, and the producer of the infographic. Ask them, “According to the title block, what is the purpose of this infographic?” Students will say that it deals with economic data about the arts available through an account produced by the Bureau of Economic Analysis.
11. *Display slide 11.* Highlight the tools used to create the title block. The tools include the TEXT feature, the GRAPHICS feature, and the BACKGROUND feature. Under TEXT, “Title,” “Subtitle 2,” and the ribbon option under “Text Frame” was used. Under GRAPHICS, the square option was used to create the rectangular box on top of the background. The BACKGROUND allows the

underlying color of each block to be changed. Explain that most features can be changed using the color palette.

12. *Display Slide 12.* Ask the students, “What features are part of this body block?” They will point out the images, the shapes, and the different sizes of text. They may also indicate the different-colored boxes used for background. Ask them, “What is the purpose of this block?” Students will say that it defines the types of production included in the Arts and Cultural Production satellite account.
13. *Display Slide 13.* Show the students the tools used to construct body block two.
14. *Display Slide 14.* Tell students the following two slides show the data tables that are the sources for the information for the graphs and charts on the infographic. The first gives the contributions to the gross domestic product (GDP) from Arts and Cultural Production.
15. *Display Slide 15.* Let them look at it for a moment. Explain that this table shows the overall contributions to GDP for the country.
16. *Display Slide 16.* Ask the students to look at the charts and describe what they see. They are likely to point out the differences in the totals as well as differences in the sectors of the economy. Ask them to discuss the pros and cons of presenting the data from the tables in this format.
17. *Display Slide 17.* Tell students that this feature allows them to create charts like the one they just saw. Ask students to make observations about the tool and identify how they would enter information into the chart spreadsheet.
18. *Display slide 18.* Discuss the grading criteria for the infographic and answer students’ questions.
19. *Display slide 19.* Tell students they have a concept sheet they can use to help organize their ideas about the AD-AS model. Be sure they understand that they are not expected to use every concept on the infographic. Their project just has to be connected to the model and use data associated with the model when possible.
20. *Display slide 20.* Explain that the resource links on the slide take them to a variety of data sources they may want to use as part of their infographic.
21. *Display slide 21.* Tell students they will now register for Piktochart and begin working on their infographic. They may use either set of instructions to begin their project.