Keynesian Economics with Balloons – An Activity to Expand Student Engagement with Economic Policy

The many facets of the Keynesian model can seem daunting for students in a Principles of Macroeconomics class. This article provides a classroom activity that engages students while reinforcing the graphs, terminology, and policy implications of the model of aggregate demand and aggregate supply. Using balloons and other materials, students will work in groups to recognize short-run gaps and identify appropriate policies to restore full employment. Graphical representations and questions for discussion are provided with each learning activity included. Further, this exercise is flexible to accommodate variances in class period lengths, labeling conventions, and follow-up learning activities and assessments.

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1. Introduction

This paper provides an overview of a student group activity used for several years in the undergraduate classroom. The classroom activity can be completed in one 50- to 80-minute class period. The purpose of this activity is to help students synergize the concepts of aggregate supply, aggregate demand, and fiscal policy while learning disequilibrium conditions and related corrective policies. Students will work together to obtain a better understanding of the graphical representations and corrective policies involved in Keynesian economics.

The Keynesian model is an important principle in macroeconomics, but includes many learning components that students find challenging. The model of aggregate demand and aggregate supply is commonly presented with theory, math, and graphs, which each serve a learning purpose but can be difficult for students to put together and see the big picture. The classroom activity described in this paper delivers a holistic presentation of the Keynesian model in a fun and engaging way using balloons, theoretical, and graphical components. This activity helps students picture the connection between the conditions of disequilibrium and the appropriate corrective policy through colorful visuals and student interaction.

2. Literature Review

Activities are established as effective methods to bolster student engagement and motivation in practice and research literature. Leach and Sugarman (2005) provide cases of educational activities and classroom games used in biology, psychology, and library science from grade school ages through college. Dicheva, Dichev, Agre, and Angelova (2015) discuss how the use of activities and gaming elements helps to emphasize course content more effectively at times than traditional "chalk and talk" approaches. Studies have shown that interactive learning can help overcome student anxiety in the classroom (Cooper, Downing, & Brownell, 2018; Oblinger, 2003). Hurst, Wallace, and Nixon (2013) find that students prefer activities that create opportunities for interactions with classmates and observe improvements in learning through enhanced literacy, critical thinking, and problem-solving skills.

The use of activity-based instruction is shown by several studies to improve academic performance (Settlage & Wollscheid, 2019; Eisenkopf & Sulser, 2016; Watts & Becker, 2008; Ball, Eckel, & Rojas, 2006). Hyun and Byun (2014) observed an increase in average exam scores after introducing the prisoner's dilemma into an introductory economics course. Emerson and Taylor (2004) saw student scores rise significantly on the Test of Understanding in College Economics (TUCE) after implementing classroom experiments. Emerson and English (2016) demonstrate student performance improves as classroom activities are increasingly used in class.

Collaborative learning activities help to foster communication between students and allow them to cooperate with each other to learn new concepts and solve problems. Cooperative learning groups are shown to improve academic achievement, assist in the development of higher-order thinking skills, and improve students' development of interpersonal skills (Riebe, Girardi, & Whitsed, 2016; Davidson & Major, 2014). Johnson and Johnson (2014) discuss the benefits of student groups in the classroom including increasing students' efforts to achieve, and improvements to one's psychological well-being. Chiriac (2014) finds that students benefit from working with others to share competencies and problem solve, leading to higher levels of class performance. Bransford, Brown, & Cocking (1999) explains that groups help students improve learning through connecting new ideas and experiences of others into their own existing knowledge to enhance understanding.

In economics, there are several components necessary for understanding the functions and challenges of a model. Students can struggle to understand and synthesize many concepts

within economic models, including mathematical relationships, graphical representations, and terminology. It is important that students receive a mix of both conceptual discussion of variable relations and relevant terminology, as well as practice creating a graphical and mathematical representation (Marks & Kotual, 2009; Wall & Benson, 2009; Lowrie & Diezmann, 2007). To ensure that these various components are integrated throughout an activity, learning objectives should be specific and clearly aligned to determine what mix of educational content is most appropriate to facilitate the desired learning outcomes (Kiryakova, Angelova, & Yordanova, 2014).

This paper provides an activity-based lesson designed to illustrate the key facets of the Keynesian model. This collaborative activity directly improves student learning outcomes while also boosting psychological factors such as motivation and engagement. This exercise requires students to integrate multiple learning components such as terminology, mathematical relationships, and graphical representations throughout the lesson. The following section provides an overview of the activity setup, materials, and background information students will need to successfully complete the lesson.

3. Activity Setup

This student activity is designed to familiarize students with the graphical framework of the Keynesian model. Students will work in small groups to recognize various economic disequilibrium and suggest policy corrections that will restore the economy to its optimal level of output, Y_N. After the completion of this lesson, students should be able to (a) differentiate between the long-run and short-run equilibrium; (b) recognize the types of disequilibrium, or gaps, which can occur in the model of aggregate demand and aggregate supply; (c) identify the corrective policies needed to return the economy to full employment; and (d) demonstrate the ability to show corrective fiscal policies graphically.

Before beginning this lesson, students need to be familiar with the individual components of aggregate demand and aggregate supply. In addition, students must recognize the natural rate of unemployment determined by the long-run aggregate supply curve. According to websites such as WallStreetMojo.com and Bookauthority.org, Mankiw's *Principles of Macroeconomics* book is one of the most popular principles of macroeconomics textbooks in the United States. This textbook provides an excellent resource for this background reading on the aggregate supply and aggregate demand model. Aggregate demand and aggregate supply are discussed chapter 20 in pages 417-449. In addition, the Mankiw textbook provides a detailed description of each graphical component of the model, including aggregate demand, long-run aggregate supply, and short-run aggregate supply. This chapter also covers shifts in the aggregate demand curve caused by changes in the components of gross domestic product (Y) including consumption (C), investment (I), government spending (G), and net exports (NX). Before setting up for this activity, explain to students that this exercise will allow them to practice recognizing various types of market disequilibrium and to show off their analytical skills by helping identify fiscal policy corrections that will help restore the economy to the natural rate of unemployment (Y_N). In other words, students get to simulate policymakers and use their skills to improve overall macroeconomic outcomes.

As discussed previously, collaborative learning projects are shown to improve students' academic performance, interpersonal skills, and motivation to achieve (Davidson & Major, 2014; Johnson & Johnson, 2014; Chiriac, 2014; Bransford, Brown, & Cocking, 1999). This student exercise aims to harness these learning benefits by using groups throughout the activity. To set up the groups, allow students to self-select into small groups of three to five each. Fittipaldi (2020) finds that students often prefer self-selected groups in a classroom and are often more comfortable working with and asking questions within their groups. Small groups of three

to five students are shown to be effective at encouraging communication and cooperation among members (Fittipaldi, 2020; Enu, Danso, & Awortwe, 2015), while larger groups can limit participation and lead to social loafing (Scager, Boonstra, Peeters, Vulperhorst, & Wiegant, 2016). Social loafing occurs when students become disengaged from the activity and thus exert less effort toward the assigned goal. Explain that each group should sit together and share materials for the activity.

Next, materials should be distributed to student groups. Each group should receive three deflated balloons of the same size, since different sized balloons may be confusing to students. Explain to students that the balloons will represent potential short-run equilibria and help to identify gaps between short-run outcomes and the natural rate. Student groups should also receive one dark marker. Because the marker will be used to label the balloons, lighter colored balloons are preferred, as this will help make the labels more visible. In addition, each group should also receive three signs reading "inflationary," "deflationary," and an arrow. The signs will be used to describe a short-run gap as inflationary or deflationary. Arrows will be used by student groups to show the direction of change in output and prices resulting from fiscal policy corrections. Lastly, distribute copies of Table 1 to each student. Students will complete this worksheet as part of the discussion for each learning activity.

Student groups must now prepare their balloons. First, instruct students to inflate a balloon to its optimal size (approximately half full). After inflating, demonstrate to students how to tie off the balloon at the enclosure. Explain to students that this balloon represents the scenario in which the short-run equilibrium between aggregate demand and aggregate supply is equal to the long-run equilibrium. Using the marker, instruct students to label this balloon $Y_1 = Y_N$, where Y_1 represents the short-run equilibrium while Y_N represents sustainable output levels in the long-run, known as the natural level of output. Remind students that this balloon size represents efficient economic activity. Balloons that are smaller or larger in the activity will face some needed policy correction to restore Y_N.

Next, tell students to inflate the second balloon, but with only about half as much air as the initial balloon. Explain to students that in this scenario the balloon is much smaller than the initial one, showing that economic activity is well below the desired level of Y_N. In this case there is an inequality, or gap, between the short-run equilibrium Y_2 and Y_N. Since Y_2 represents underperformance of output in the short-run relative to the natural level of output, Y_N, a deflationary gap exists. Instruct students to label this balloon $Y_2 < Y_N$ using the marker to show this deflationary gap.

Lastly, instruct students to inflate the third balloon with more air than the initial balloon, yet not so much it explodes. This sometimes results in a few exploded balloons, so always bring some extras just in case. Explain that in this scenario, the short-run output level, Y_3, exceeds the natural rate of output, Y_N. This overperformance in short-run output levels results in an inflationary gap. Instruct student groups to label this balloon $Y_3 > Y_N$ using the marker provided to show the inflationary gap. Now, each group should have the supplies they need. The next section discusses the implementation of the class activities for student groups.

4. Implementation

To begin this activity, explain that students will be shown various graphical depictions of the model of aggregate demand and aggregate supply. Each graph includes the vertical long-run aggregate supply curve, denoted as LRAS, showing sustainable output levels at the non-inflationary full-employment level of real GDP referred to here as Y_N. SRAS represents the short-run aggregate supply curve, demonstrating the short-run relationship between average price levels and real GDP. Lastly, the downward sloping aggregate demand curve is

shown as AD, representing overall demand for goods and services. Y_t represents the short-run equilibrium observed where the SRAS and AD curves meet, which may or may not be equal to Y_N. Student groups will identify and label any short-run gaps as inflationary or deflationary. After recognition of the existing gaps, explain that student groups will determine which fiscal policy measures could be taken to restore the economy to its natural level of output, Y_N.

Suggest to each student group that they select one member for each of the three tasks involved. Each group can designate one member to represent their collective response using the balloons, while two others are tasked to display either the signs or directional arrows for each learning activity. Explain that the instructor asks each question, student groups must discuss their answer, and then respond by having their designated member hold up the correct balloon or directional sign. After student responses have been shared, the instructor will state the correct answer, pausing to allow students to write down the correct response in Table 1. To guide the activity and allow students to keep notes on various scenarios, instruct each student to complete Table 1 during the course of the activity. Table 1 is included in Appendix C at the end of the paper.

Learning Activity 1: Present Figure 1 to the students. This activity can be done with physical or electronic media based on the instructor's preferences and resources available in the classroom. The teacher should emphasize both the short-run equilibrium, Y_1, as well as the long-run equilibrium, Y_N, in this example. Ask student groups the questions as shown in Table 1. Be sure to allow time for groups to discuss their answers. A guide for this discussion is provided below, with instructor questions shown in italics and correct student responses following. A summarized explanation is given after each question to assist with the discussion.

Figure 1

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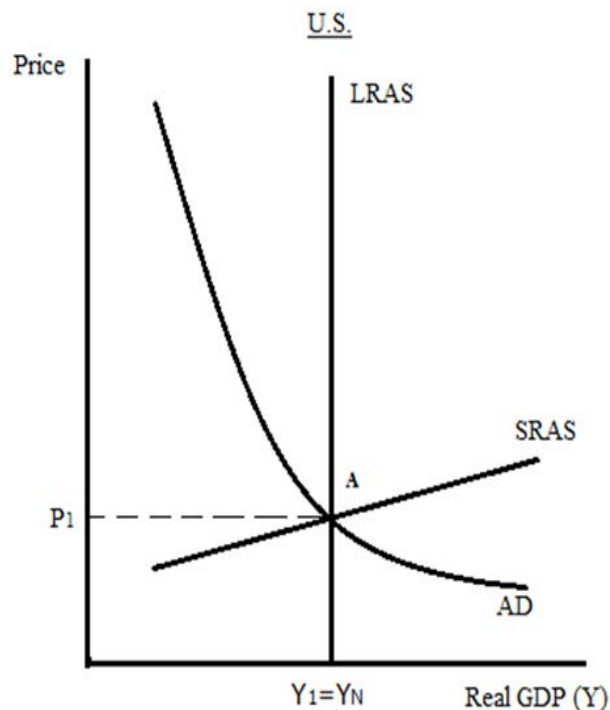
Question 1. Is there a gap? If so, what type? No, there is no gap shown in Figure 1.

Explanation: $Y_1 = Y_N$

Question 2. Which balloon best describes this scenario? Hold up balloon labelled $Y_1 = Y_N$.

Explanation: $Y_1 = Y_N$ matches the equilibrium output shown in Figure 1.

Question 3. What type of policy is used to fix this gap? No policy.

Explanation: No corrective policy needed since no gap is observed.

Question 4. Which direction would government spending move? No change.

Explanation: No gap is observed, thus no corrective policy is needed.

Question 5. Which direction would taxes move? No change.

Explanation: No corrective policy because there is no gap.

Question 6. What effect will this policy have on price levels? No change.

Explanation: No corrective policy so no resulting change in prices.

Question 7. What effect will this policy have on GDP? No change.

Explanation: No corrective policy so no observed change in output.

In the discussion of learning activity 1, explain that this scenario represents an optimal level of economic activity. In this case, the short-run equilibrium, Y_1, is equal to the sustainable level of output in the long-run, Y_N. Because of this equality, there is no gap to observe. Since there is no gap, there is no reason to implement corrective fiscal policy. Government spending and/or taxes remain at their initial levels, while average prices and GDP do not change.

Learning Activity 2: Show students the graph in Figure 2. Point out the short-run equilibrium, Y_2, and compare this level of economic activity with the full employment level of output, Y_N. Remind students to continue filling out Table 1 with each learning activity. A guide for the discussion questions for this scenario is given below.

Figure 2

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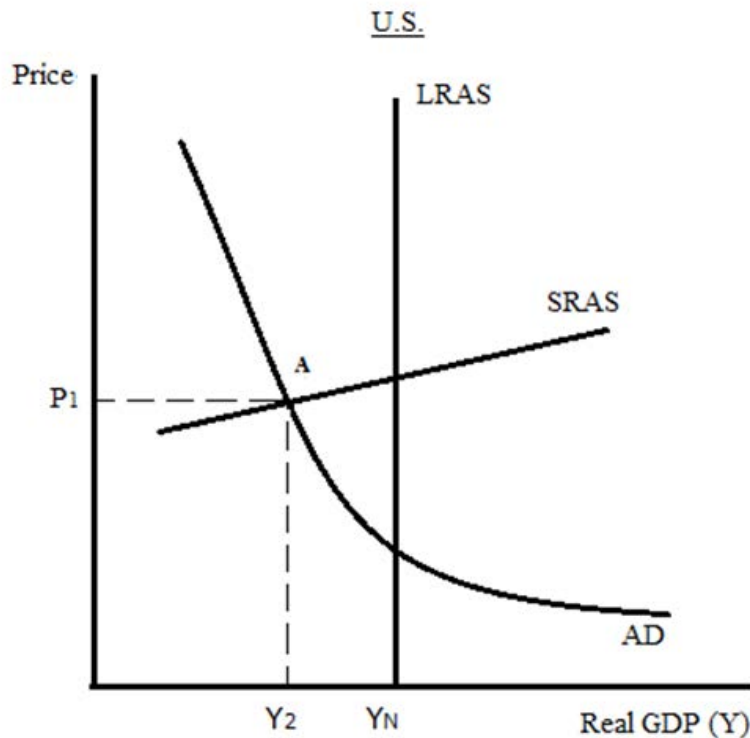
Question 1. Is there a gap? If so, what type? Yes. Hold up deflationary sign.

Explanation: Figure 2 shows $Y_2 < Y_N$.

Question 2. Which balloon best describes this scenario? Hold up balloon labeled $Y_2 < Y_N$.

Explanation: $Y_2 < Y_N$ matches the scenario shown in Figure 2.

Question 3. What type of policy is used to fix this gap? Hold up inflationary sign.

Explanation: If the balloon is deflated, one must inflate it to get it back to its optimal size. Inflationary policy helps to inflate a deflated economy just like in the balloon example.

Question 4. Which direction would government spending move? Arrow sign pointing up.

Explanation: Inflationary fiscal policy could result in an increase in government spending.

Question 5. Which direction would taxes move? Arrow sign pointing downward.

Explanation: Tax cuts could occur due to inflationary policy. Taxes and consumption are inversely related, meaning tax reductions lead to higher consumption levels.

*Question 6. What effect will this policy have on price levels?* Arrow sign pointing upward.

Explanation: Inflationary fiscal policy shifts AD to the right, whether it involves tax cuts or increases in spending. This rightward shift results in higher prices.

Question 7. What effect will this policy have on GDP? Arrow sign pointing up.

Explanation: Inflationary fiscal policy leads to higher output as aggregate demand increases.

      Finally, show Figure 3 to your students. Discuss the effects of the inflationary fiscal policy measures involved in this learning activity. Also, be sure to emphasize the different directions of change needed for government spending and taxes to restore Y_N. Remind students that the formula for GDP (Mankiw, p. 423) is $Y = C + I + G + NX$. When government spending increases, GDP is directly influenced, increasing as well. Reductions in taxes, however, lead to higher levels of consumption. Increasing consumer spending drives up aggregate demand, leading to higher prices and output.

Figure 3
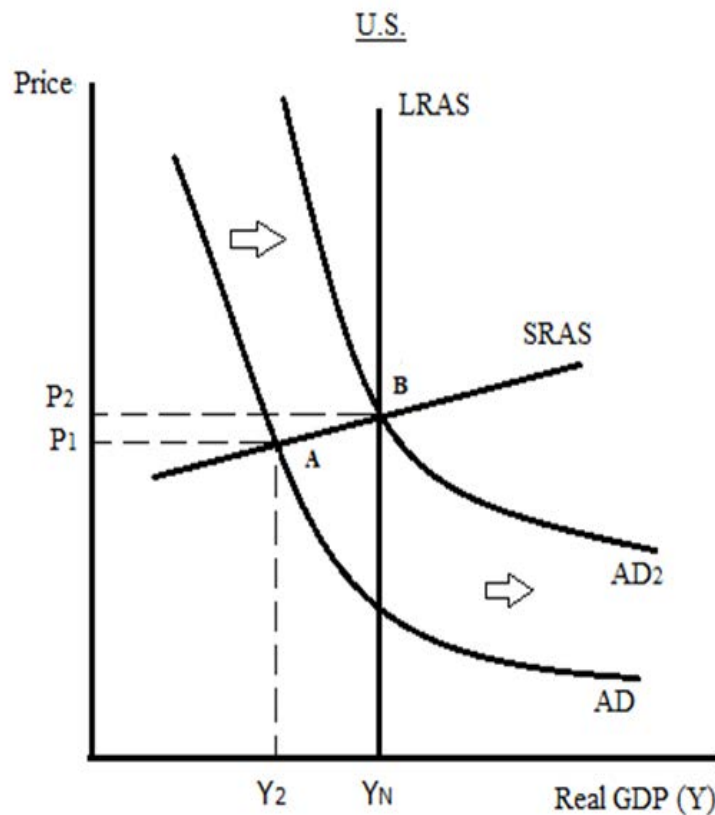
      Learning Activity 3: Display Figure 4 to the students. Be sure to emphasize the short-run equilibrium, Y_3, which exceeds the natural level of output, Y_N. Prompt students to include their responses to questions in the Learning Activity 3 portion of Table 1. Suggested questions for discussion from Table 1 are shown below.

Figure 4
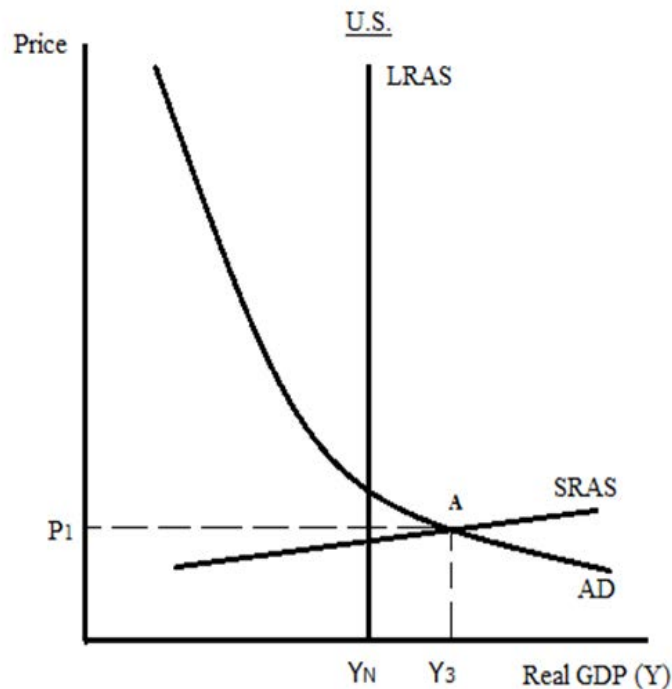
Question 1. *Is there a gap? If so, what type?* Yes. Hold up inflationary sign.

Explanation: The gap is inflationary since $Y_3 > Y_N$.

Question 2. *Which balloon best describes this scenario?* Hold up balloon labelled $Y_3 > Y_N$.

Explanation: The outcome depicted in Figure 4 represents an inflationary gap.

Question 3. *What type of policy is used to fix this gap?* Hold up deflationary sign.

Explanation: In the case that the economy is inflated, a deflationary fiscal policy will help restore the natural level of output, Y_N. Explain that this works with the balloon example as well. If a balloon is too inflated and about to pop, one can let some air out of it, or deflate it, to restore it to a sustainable size.

Question 4. *Which direction would government spending move?* Hold arrow sign pointing down.

Explanation: Government spending could be reduced to address an inflationary gap.

Question 5. *Which direction would taxes move?* Hold arrow sign pointing upward.

Explanation: Tax increases will lead to lower consumption and thus reduce aggregate demand.

Question 6. *What effect will this policy have on price levels?* Hold arrow sign pointing down.

Explanation: Deflationary policy reduces aggregate demand, leading to lower prices.

Question 7. What effect will this policy have on GDP? Arrow sign pointing downward.

Explanation: Deflationary fiscal policy leads to lower levels of output as aggregate demand falls.

Next, show Figure 5 to the students. Discuss the effects of the deflationary fiscal policy measures involved in this learning activity. Also, prompt students to focus on changes in government spending and taxes needed to restore Y_N. In this example, deflationary policy could include an increase in taxes, a reduction in government spending, or both.

Figure 5
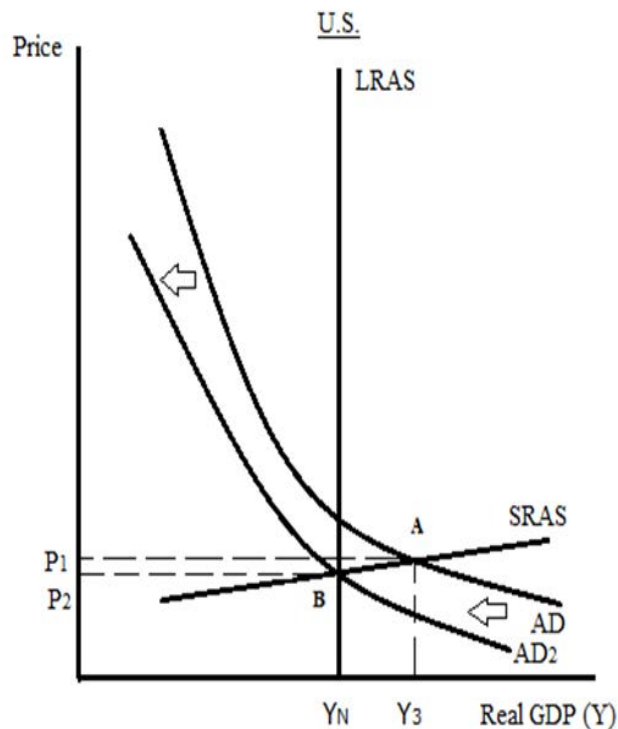
Learning Activity 4: Show Figure 6. When discussing this graph with your students, focus on the short-run equilibrium, Y_2, which is below the long-run equilibrium output, Y_N. Explain that this graph demonstrates a reduction in aggregate demand leading to output levels below its natural rate. Remind students of reasons why the AD curve might have shifted left by showing them the formula: $Y = C + I + G + NX$. A reduction in one or more components, ceteris paribus, leads to a leftward shift in the AD curve and a reduction in GDP. Questions for discussion from Table 1 are provided below.

Figure 6
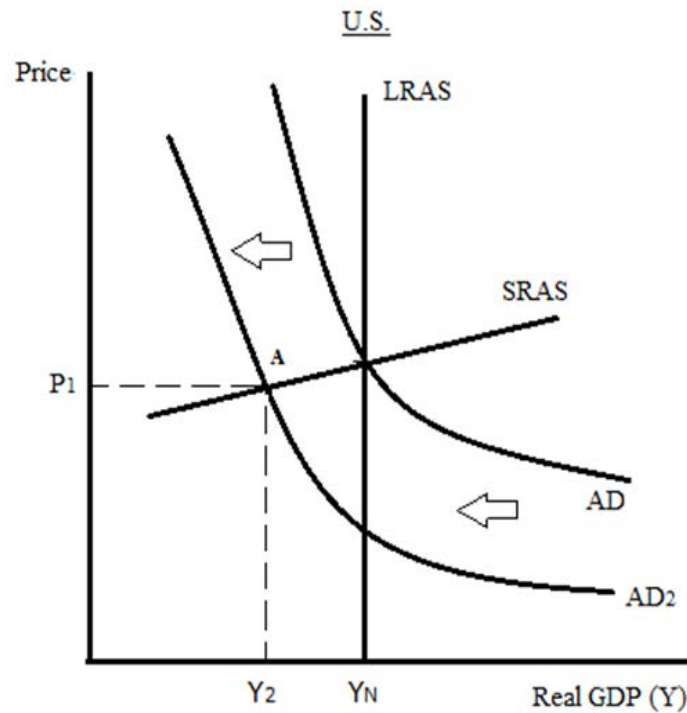
Question 1. Is there a gap? If so, what type? Yes. Hold up deflationary sign.

Explanation: The gap is deflationary because Y_2 is less than Y_N.

Question 2. Which balloon best describes this scenario? Hold up balloon labelled $Y_2 < Y_N$.

Explanation: A deflationary gap is represented in Figure 6.

Question 3. What type of policy is used to fix this gap? Hold up inflationary sign.

Explanation: In the case that the economy is deflated, an inflationary fiscal policy will help restore the natural level of output, Y_N.

Question 4. Which direction would government spending move? Arrow sign pointing up.

Explanation: An increase in government spending could be used in the case of a deflationary gap.

Question 5. Which direction would taxes move? Arrow sign pointing downward.

Explanation: A tax cut will lead to an increase in consumption and thus a higher level of output.

**Question 6. What effect will this policy have on price levels?** Arrow sign pointing up.

Explanation: Inflationary fiscal policy tends to inflate prices as aggregate demand increases.

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Question 7. What effect will this policy have on GDP? Arrow sign pointing upward.

Explanation: GDP increases in response to inflationary fiscal policy.

Next, show students Figure 7 to compare your discussion results with the effects of corrective fiscal policy. Point out the observed increases in prices and GDP as discussed. Also, be sure to emphasize the different directions of change observed for government spending and taxes. In this example, taxes decreased and/or government spending increased, leading to rising prices and higher output.

Figure 7
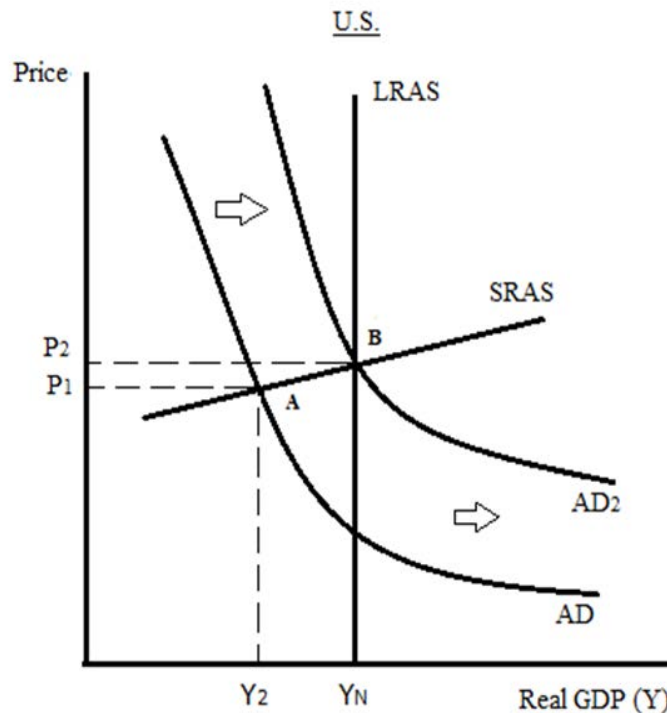
Learning Activity 5: Show Figure 8. Emphasize the short-run equilibrium, Y_3, which exceeds the long-run equilibrium output, Y_N. Remind students of reasons why the AD curve might shift right using the formula: $Y = C + I + G + NX$. An increase in one or more of these components, ceteris paribus, results in a rightward shift in the AD curve and an increase in GDP in the short run. Discussion questions from Table 1 are provided below.

Figure 8
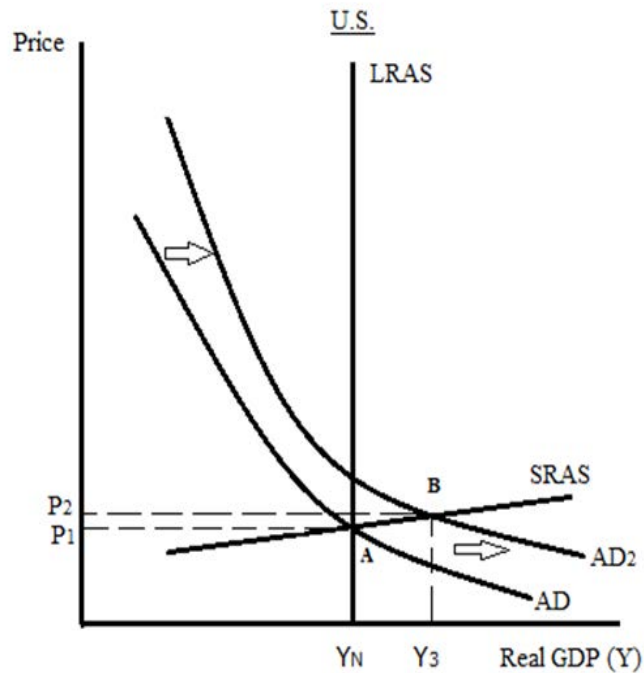
Question 1. Is there a gap? If so, what type? Yes. Hold up inflationary sign.

Explanation: Figure 8 shows $Y_3 > Y_N$, demonstrating an inflationary gap.

Question 2. Which balloon best describes this scenario? Hold up balloon labelled $Y_3 > Y_N$.

Explanation: This balloon represents the inflationary gap observed in Figure 8.

Question 3. What type of policy is used to fix this gap? Hold up deflationary sign.

Explanation: Deflationary policy can be used to correct an inflationary gap.

Question 4. Which direction would government spending move? Arrow sign pointing down.

Explanation: Deflationary policy could result in a reduction in government spending.

Question 5. Which direction would taxes move? Arrow sign pointing upward.

Explanation: Tax increases are a possible type of deflationary fiscal policy. Remind students that tax increases lead to reduced consumption, thus reducing aggregate demand.

Question 6. What effect will this policy have on price levels? Arrow sign pointing downward.

Explanation: Deflationary fiscal policy lowers prices in response to an inflationary gap.

Question 7. What effect will this policy have on GDP? Arrow sign pointing down.

Explanation: Deflationary fiscal policy shifts the AD curve to the left, reducing output.

Following this discussion, present Figure 9 to your students. Focus on the resulting decreases in prices and GDP as discussed in Table 1. Also, be sure to point out the different directions of change observed for government spending and taxes. Taxes were increased and/or government spending was reduced as part of the deflationary fiscal policy, leading to lower prices and output.

Figure 9
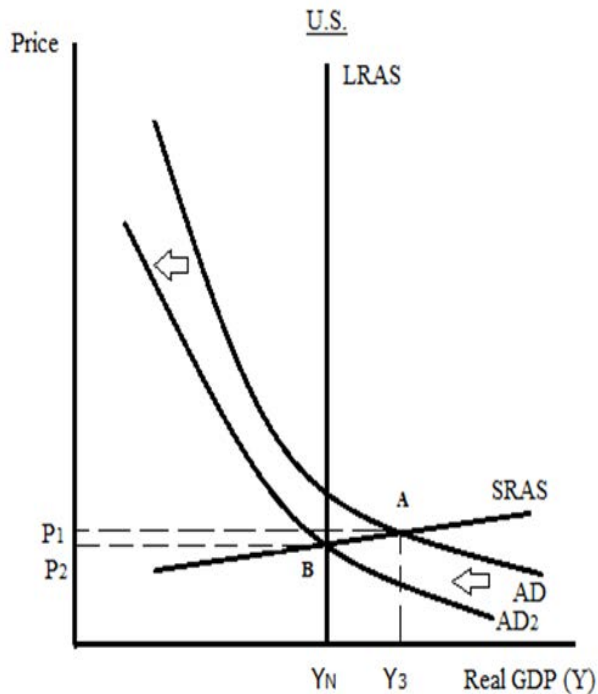
Learning Activity 6: Present Figure 10 to your students. Be sure to draw attention to the short-run equilibrium, Y_2, positioned below the natural level of output, Y_N. Additionally, emphasize the leftward shift in the SRAS curve that has led to this outcome. Remind students of the reasons that the SRAS curve might shift left by referring to pages 436-437 in Mankiw (2018). Leftward shifts in SRAS occur due to decreases in resources such as capital, labor, or natural resources, expectations of higher future prices, and reductions in technology.

Figure 10

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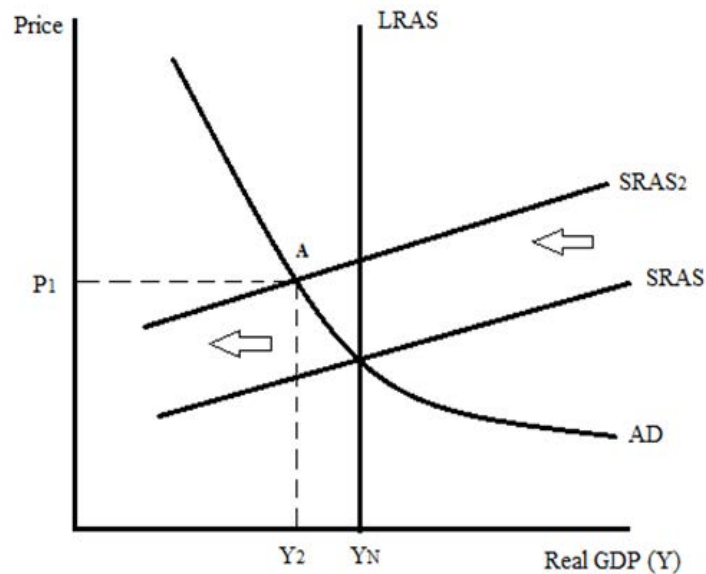
Question 1. *Is there a gap? If so, what type?* Yes. Hold up deflationary sign.

Explanation: Figure 8 depicts a deflationary gap.

Question 2. *Which balloon best describes this scenario?* Hold up balloon labelled $Y_2 < Y_N$.

Explanation: The deflationary gap is represented by $Y_2 < Y_N$.

Question 3. *What type of policy is used to fix this gap?* Hold up inflationary sign.

Explanation: Inflationary fiscal policy is used to address a deflationary gap.

Question 4. *Which direction would government spending move?* Arrow sign pointing upward.

Explanation: An increase in government spending could be used to address a deflationary gap.

Question 5. *Which direction would taxes move?* Arrow sign pointing down.

Explanation: A tax reduction can be used to address a deflationary gap. Remind students that tax cuts result in higher levels of consumption from buyers, and thus increase aggregate demand.

Question 6. *What effect will this policy have on price levels?* Arrow sign pointing up.

Explanation: Inflationary fiscal policy inflates prices in response to a deflationary gap.

Question 7. *What effect will this policy have on GDP?* Arrow sign pointing upward.

Explanation: Inflationary policy shifts the AD curve right, leading to an increase in output.

After this discussion, show Figure 11 to the students. Emphasize the resulting increases in prices and output following the corrective fiscal policy. Remind students of the direction of change observed for government spending and taxes. In this example, government spending increased and/or taxes were decreased to enact the desired inflationary fiscal policy to correct the deflationary gap.

Figure 11

U.S.
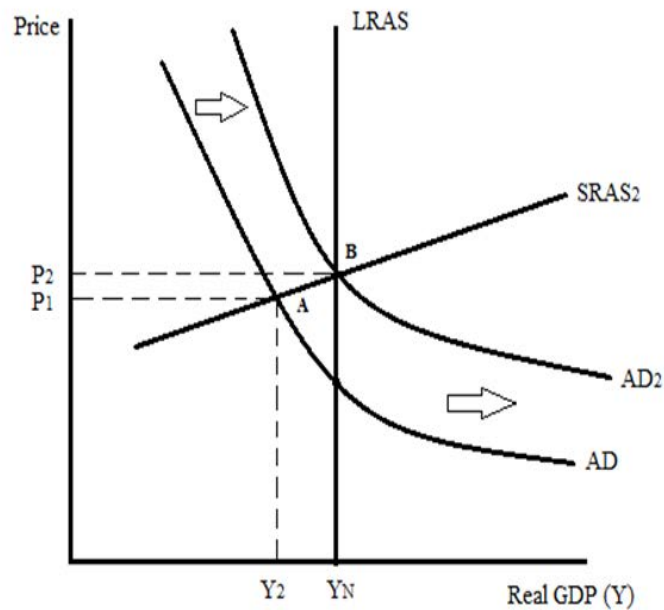
This section provides six learning activities to discuss with student groups. The first three activities require students to identify various disequilibrium scenarios and determine possible corrective measures to restore full employment. The last three activities, however, are more advanced. Each of these scenarios demonstrates how a short-run disequilibrium results following a shift in AD or SRAS. Students can then identify the resulting gap and work together to demonstrate potential corrective measures. The following section lists additional opportunities for future connections with various macroeconomic concepts.

5. Connections and Reinforcements

This activity offers opportunities to emphasize components of the Keynesian model, reinforcing students' understanding of relationships among macroeconomic variables. The classroom exercise in this article provides a good opportunity to reconnect with previous lessons. These connections to previously established concepts are designed to help students better contextualize the information and see how it fits into the larger concepts of aggregate supply and aggregate demand.

The first concept to reinforce involves the natural rate of unemployment. Mankiw (2018) provides a discussion of the natural rate of unemployment in chapter 15 on pages 294-301. Remind students that the natural rate of unemployment represents a steady state of full employment for workers. If a country is currently at its natural rate of unemployment,

unemployment is at its lowest sustainable level without creating inflation among prices. The balloon labelled $Y_1=Y_N$ best demonstrates this outcome. Higher unemployment levels represent a cyclical downturn in the economy. This scenario is illustrated by a deflationary gap, showing that resource usage and efficiency are below sustainable levels in the long-run. The balloon labelled $Y_2<Y_N$ best represents this case. An inflationary gap, however, signals that unemployment levels have fallen below their steady state, and thus are not sustainable over time. This occurrence is best shown with the balloon labelled $Y_3>Y_N$.

A second concept to reinforce is the production possibilities frontier. Mankiw (2018) discusses the production possibilities frontier in chapter 2 on pages 24-26. Remind students that the production possibilities frontier represents productive capacity for an economy. Emphasize that when a country's level of economic activity is located on the production possibilities frontier, that country is at full employment. In this case, the country would produce at the natural level of output and all inputs are being used as efficiently as possible. This scenario is represented by the balloon labelled $Y_1=Y_N$. In the case of a deflationary gap, a country's level of output is located inside the production possibilities frontier, showing an inefficiency in resource utilization represented by a deflationary gap. Remind students that the balloon labelled $Y_2<Y_N$ shows this deflationary gap. Lastly, explain that in an inflationary gap, a country's level of production exceeds full employment, causing inflation among prices. In this instance, the country's current level of output is not sustainable given available resources, and thus would be located outside of the production possibilities frontier. The balloon labelled $Y_3>Y_N$ represents this occurrence.

This section provided two potential connections with fundamental economic concepts after completion of the activity. Overall, this paper offers multiple ways to engage students using collaborative exercises. These exercises emphasize multiple learning components including terminology, mathematical relationships, and graphical representations. The following section summarizes the learning benefits of this activity.

6. Conclusion

Research shows active learning in the classroom can help to engage students directly by allowing them to have an interactive role in the day's lesson. Additionally, working in groups helps students to improve communication skills and share strengths with their peers. Further, studies have shown that active learning in the classroom can increase student comprehension of the material and enhance their learning experience. This classroom experience helps students play an active part in the classroom and engage with others to synthesize macroeconomic concepts from the Keynesian model.

The classroom exercise can be completed in one class day, or expanded with the addition of follow-up activities to span multiple days at the instructor's discretion. This activity reinforces students' understanding of Keynesian economics by demonstrating various cases of disequilibrium and the corrective policies that could be used to restore the market to an efficient outcome. Students are engaged through the use of balloons and a set of signs to practice their understanding of the Keynesian model via collaboration and discussion.

Economics is commonly perceived as a tough discipline for students due to graphs and theory. This paper provides a low-cost, adaptable activity to engage and reinforce challenging concepts. Personal experience as well as student feedback have shown this activity to be effective in accomplishing these goals. In addition, the activity can easily be adapted to fit various macroeconomic scenarios, graphing and labeling conventions, follow-up assignments, and preferred terminology of a given instructor.

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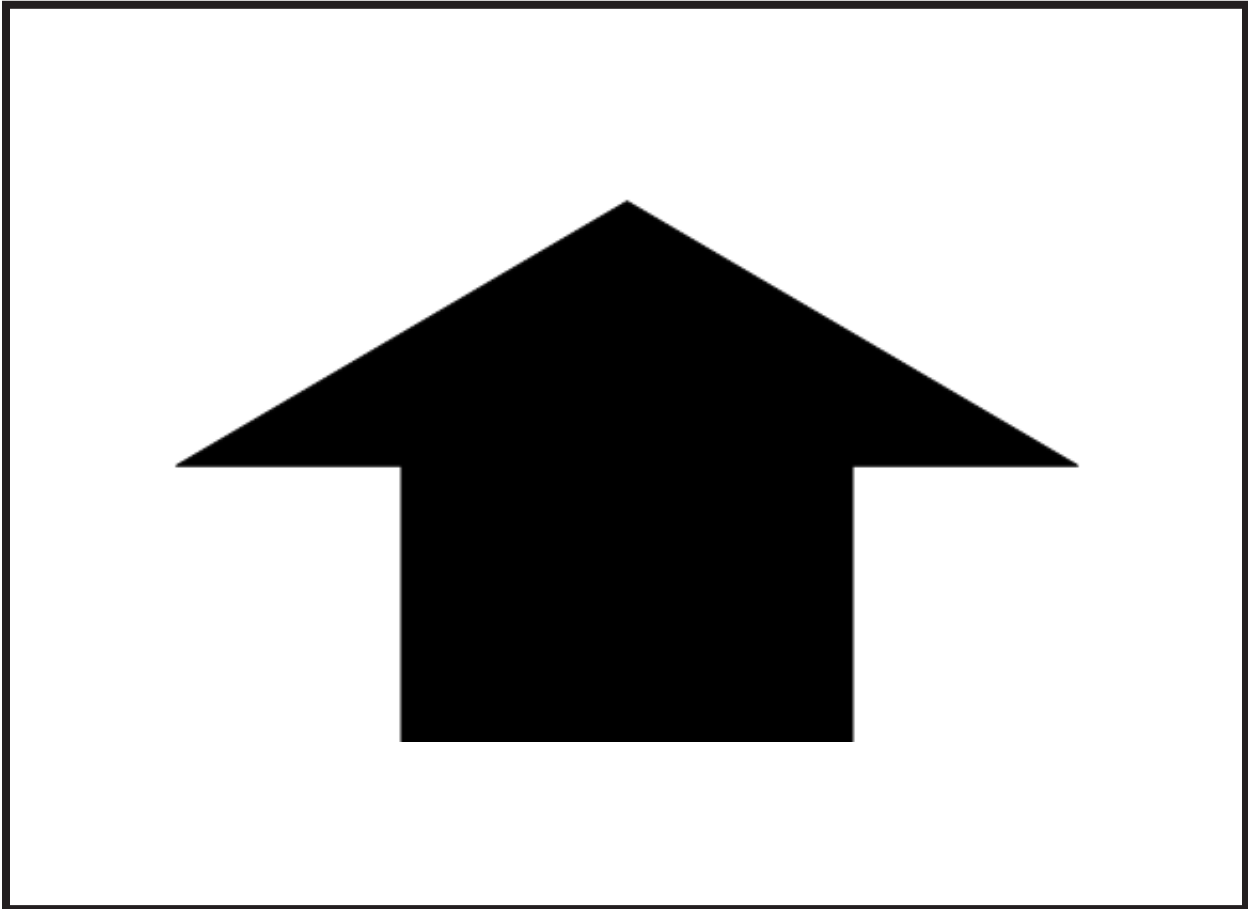
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Appendix A: Signs for Student Groups

INFLATIONARY

DEFLATIONARY

Appendix B: Arrow Sign for Student Groups

Appendix C: Table 1

Questions	Responses
Learning Activity 1	
1. Is there a gap? If so, what type?	
2. Which balloon best describes this scenario?	
3. What type of policy is used to fix this gap?	
4. Which direction would G move?	
5. Which direction would T move?	
6. What effect will this policy have on prices?	
7. What effect will this policy have on GDP?	
Learning Activity 2	
1. Is there a gap? If so, what type?	
2. Which balloon best describes this scenario?	
3. What type of policy is used to fix this gap?	
4. Which direction would G move?	
5. Which direction would T move?	
6. What effect will this policy have on prices?	
7. What effect will this policy have on GDP?	
Learning Activity 3	
1. Is there a gap? If so, what type?	
2. Which balloon best describes this scenario?	
3. What type of policy is used to fix this gap?	
4. Which direction would G move?	
5. Which direction would T move?	
6. What effect will this policy have on prices?	
7. What effect will this policy have on GDP?	
Learning Activity 4	
1. Is there a gap? If so, what type?	
2. Which balloon best describes this scenario?	
3. What type of policy is used to fix this gap?	
4. Which direction would G move?	
5. Which direction would T move?	
6. What effect will this policy have on prices?	
7. What effect will this policy have on GDP?	

Table 1 Continued

Questions	Responses
Learning Activity 5	
1. Is there a gap? If so, what type?	
2. Which balloon best describes this scenario?	
3. What type of policy is used to fix this gap?	
4. Which direction would G move?	
5. Which direction would T move?	
6. What effect will this policy have on prices?	
7. What effect will this policy have on GDP?	
Learning Activity 6	
1. Is there a gap? If so, what type?	
2. Which balloon best describes this scenario?	
3. What type of policy is used to fix this gap?	
4. Which direction would G move?	
5. Which direction would T move?	
6. What effect will this policy have on prices?	
7. What effect will this policy have on GDP?	