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AP MACROECONOMICS

The Ultimate Student's Guide to AP Macroeconomics

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TABLE OF CONTENTS

8

Introduction

9

About Us

12

Is AP Macroeconomics
Hard?

21

Production Possibilities
Curve (PPC)

29

Absolute vs. Comparative
Advantage

36

Aggregate Demand

TABLE OF CONTENTS

45

What Shifts Aggregate
Demand and Supply?

61

The Business Cycle

69

How to Calculate
Gross Domestic Product
for AP Macroeconomics

77

Inflation

83

Unemployment

89

How to Graph Short-Run
Phillips Curves

TABLE OF CONTENTS

96

The Multiplier Effect

101

The Spending Multiplier

107

The Money Multiplier

112

Crowding Out Effect

117

Financial Assets

124

Monetary Policy

131

Fiscal Policy

TABLE OF CONTENTS

138

Taxes

147

10 Must-Know Basic
Economic Concepts for
AP Economics

156

6 Ways to Score Big on
the AP Macroeconomics
Multiple Choice

161

7 Actionable Strategies
for Tackling
AP Macroeconomics Free
Response

TABLE OF CONTENTS

167

How to Study for AP
Macroeconomics

180

One Month
AP Macroeconomics
Study Guide

212

The Ultimate List of
AP Macroeconomics
Tips

Introduction

AP Macroeconomics is no walk in the park. Last year, only 16.1% of students earned a 5 on the exam.

That's why we've created this comprehensive study tool. It's intended to be a helpful resource for any student planning to take the AP Macroeconomics exam. By beginning here, you'll have a better understanding of the test, and receive essential tools to set yourself up for success.

This guide starts by introducing the exam format, curriculum, and scoring guidelines. Then it includes a series of detailed content guides and crash course reviews. The last section features study tips and strategies to help you score every possible point on test day. With this eBook, you'll be able to confidently take action in creating your study plan and framing your goals.

This book features information from the [Albert Blog](#), where new academic resources are published every day of the week. Be sure to regularly check the blog and subscribe to hear about our new posts. You can also find tips and study guides for your AP classes, and admissions advice for your dream school on our blog.

E-mail us at hello@albert.io if you have any questions, suggestions, or comments!

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About Us



What is Albert?

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Why Educators Love Us

We asked teachers how their students did after using Albert.

Here is what they had to say:



My students had an 81.2% passing rate - the previous year was 76% (the highest rate in our county)! I am thrilled. I had 64 students total, with 6 receiving 5s, 19 scoring 4s, 27 receiving 3s, 10 scored 2s and 2 received 1s.

Susan M., JP Taravella High

70% of my students scored 3 or higher. This is up from last year, and is also well above the national average. Needless to say, I am very happy with my students' success. I used Albert more intentionally this year. In the beginning of the year, I wanted students simply to answer questions and practice. Once they had 150-200 questions answered, we looked for trends, strengths, and weaknesses and worked on addressing them. Students were tasked with increasing their answer accuracy no matter how many questions it took, then they set their own goals (some wanted to focus around tone; others needed practice with meaning as a whole).



Bill S., Lapeer High School



Last year 40% passed with 3s and 4s. This year 87% passed, most had 4s and 5s. We used the stimulus-based multiple choice questions throughout the year and as review for the exam. I think it helped tremendously.

Alice P., First Baptist Christian Academy

Why Students Love Us

We asked students how they did after using Albert.

Here is what they had to say:



I scored very well this year – four 5s and one 4. Albert helped me get used to the types of questions asked on the exam and overall my scores were better this year.

Robyn G., Chambersburg Area Senior High School

Last year was my first year taking an AP test, and unfortunately I did not do as well as I had hoped. The subject had not been my best, and that was definitely displayed on my performance. However this year, I made a much higher score on my AP test. The previous year had been AP World History and I had made a 2. For this year it was AP English Language, and I scored a 4. There was a definite jump in my score, because Albert pushed me to focus on my weaknesses and form them into strengths.



Charlotte R., Rome High



I scored a 4 on AP Biology, much higher than expected. Albert was an effective resource to guide me through AP Biology. Keeping up with it consistently all year as I learned the lesson in class was crucial to reinforcing my understanding and long-term memorization of Biology. After class each day, Albert helped to sink in the ideas that I was taught in the morning.

Lily O., Wake Forest High School

Is AP Macroeconomics Hard?



[Image Source: Wikimedia Commons](#)

Macroeconomics is one of the dreaded courses in a high school career. When hearing anything relating to economics, a student automatically associates the subject with daunting long form formulas that require specialized knowledge and years of research. However, the average macroeconomics course does not require that level of complexity, but rather more practical knowledge and study into the theory of [economics](#), rather than the practice. The AP Macroeconomics test is not necessarily a walk in the park, but it is an exam with concepts that you can grasp without prior knowledge of economics.

Is AP Macroeconomics Hard? Cont.

By the Numbers

First of all, we should take a look at the actual statistics associated with the exam itself to determine its complexity. Compared to other exams, AP Macro is in the middle of the road – it is neither difficult nor easy. This could lead us to speculate that macroeconomics depends on studied skills rather than previous knowledge. Let's go into more detail.

According to the CollegeBoard's official Twitter page, the 2016 AP Macroeconomics breakdown is as follows:

Score	Percentage
5	16.1%
4	23.4%
3	16.2%
2	17.5%
1	26.8%

As can be seen in the chart, the exam has a pass rate of about 55.7% when taking scores of 3,4, and 5 into account, or 73.2% if the passing grade of 2 is added in, although most universities do not accept a score of 2 for college credit. This pass rate is higher than the comparatively difficult [Physics 1](#) exam, which had a rate of 39.2%, and lower than the 89% of the relatively easy [Spanish Language](#) exam. As previously mentioned, this puts macroeconomics at a medium difficulty.

Surprisingly, this year's scores had a lower rate of 3's than 4's. A score of 3 is the most commonly accepted AP Macro score for granting college credit.

Is AP Macroeconomics Hard? Cont.

The high rate of 4's might point to the exam being easy for those who put in a moderate amount of self-study in addition to attending classes, whereas a score of 3 could be those who only took the exam based on what they learned in class, providing they did the right amount of coursework.

Finally, the amount of 5's is a little less than 30% of all those who passed the exam, and 16.1% of overall test takers. This rate of perfect scores is high when taking the relative difficulty of the exam into account. You can conclude that extra studying outside of coursework can lead to a great score on your exam.

Exam Structure

The AP Macro exam is straightforward in its structure and purpose. The exam itself is separated into two test sections. These sections are further separated by the overall themes of the exam, which cover seven broad categories of macroeconomics. These categories are based on what should be learned in a typical high school macroeconomics course.

The first section is multiple choice, which consists of 60 questions on the various topics. The number of questions on any given topic reflects the percentage set up in the outline. 70 minutes is allocated to this section and it is worth two-thirds of the final grade. The questions are not organized by difficulty or theme.

The second section is made up of three free response questions. The free response questions are often considered the most difficult portion of the exam, due to their free-form nature and their complexity. The first question is generally the longest and needs the most dedicated time; the other two usually have to do with drawing a graph and answering a simpler question than the first.

All free response questions are divided into parts that are indicated by letters such as (a), (b), (c), and so on. These parts are independently graded. This means that each part of a question acts as its own question. For example, if you answer parts (a) and (b), but don't answer part (c), you still get credit to your final score from parts (a) and (b).

Is AP Macroeconomics Hard? Cont.

The free response question part of the exam is 60 minutes long and worth one-third of the final score. Usually the first question will take about 30 minutes and the last two about 15 minutes each.

Content

The content of the exam can be difficult due to its wide range of subjects and their varying complexity. The good news about these topics is their propensity to build on other topics. One topic might be related to the other where studying the first will help answer a question regarding the second.

The following is an outline of the topics covered by the exam as well as their percent share of the exam as a whole:

1. Basic Economics: 8-12%
2. Measurement of Economic Performance: 12%-16%
3. National Income and Price Determination: 10%-15%
4. The Financial Sector: 15%-20%
5. Inflation, Unemployment, Stabilization, and Related Economic Policy: 20%-30%
6. Economic Growth and Productivity: 5%-10%
7. International Economics, Trade, and Finance: 10%-15%

The largest portion that is covered by the exam has to do with economic policy and the determinant factors of economic policy. This section mainly has to do with the Federal Reserve and its interactions with the economy, as well as other fiscal policies enacted by the government. It also looks over the effects of inflation and unemployment on these policies and their relation to the economy.

The financial sector section and the international economics section are closely related overall. These sections will more than likely be studied together in class due to the effects one has on the other. The general topics of these sections mainly have to do with monetary policy and foreign exchange, which determines the amount of money the government prints and overall money supply.

Is AP Macroeconomics Hard? Cont.

Apart from the relation between those two sections, the majority of the topics that are covered depend heavily on the knowledge of the other topics. For example, all subjects will depend on your knowledge of basic economics. The order of these sections can help in identifying what topics need more concentration. This can help structure your study around certain topics more than others.

For example, given that all topics depend on basic economics, you should concentrate a large amount of your study time on this concept, despite the fact that a small part of the exam deals with basic economics directly. On the other hand, despite having a larger share of the exam, the international economics section will only need coverage of specific topics outside of class, given that it relies on other concepts that have already been studied.

Skills Required

Passing the AP econ exam is only partly based on how much you pay attention in class. When you have acquired the necessary knowledge to be able to answer questions on the exam, you have to hone your test taking skills to be able to answer to your best ability. Some of these may seem like common knowledge while others will be quite specific to economics.

Organization

The first key skill to take the test well is organization. While organization is basically a requirement for any test, the macroeconomics exam is especially important given the reliance on graphs and the extensive list of topics related to the test's content. The free response questions will more than likely ask you to draw multiple graphs. You will also have a suggested ten minutes before answering to develop coherent answers. These answers should be in the order of the parts of the questions, and answers to separate parts should be labeled as such.

Is AP Macroeconomics Hard? Cont.

Graphs for the exam should be neat and able to be read. Even when a graph is not required, it might be helpful to draw a graph anyway to be able to grasp the answer to a question. Graphs should not stand alone when answering a question; rather they should be logically explained in order to fully give a response.

Time Management

In addition to organization, you should have a grasp. Time management is key for the multiple choice questions, where you have about a minute to answer each question. Instead of spending a long time trying to answer a question, you should skip it and move on so that you can come back to it later once you have answered all the questions that you can in under a minute. This way, you can appropriately use every minute allocated to the multiple choice exam.

There is a ten minutes planning time that is suggested before answering a free response question as well. This time should be used wisely to properly organize your answer. This planning time will help you fully utilize the limited answering time you have, as you will have already planned out your answer.

Practice, Practice, Practice

The key to passing any AP econ exam obviously requires an aspect of self-study. This means studying for the exam outside of class to develop knowledge that may not have been properly covered by your teacher. There are tons of practice tests online that you can utilize to formulate responses and perfect your skills.

This is especially helpful for practicing drawing graphs and gaining the proper terminology. As previously stated, drawing a legible graph makes the difference between receiving credit for a question or none at all. Taking practice tests will also help you develop the economics jargon that is used in answering a question. Money and income are two different things, for example. Each label on a graph has its own fixed symbol, such as “D” for demand and “Q” for quantity. Practicing will help you get a grasp on the language of macroeconomics.

Is AP Macroeconomics Hard? Cont.

Asking Questions

This skill is as relevant online as it is in class. When in class, make sure you settle any doubts with your teacher. Your teacher is your access to a real-time knowledge base. Your teacher created the curriculum of the class according to CollegeBoard standards that was subject to CollegeBoard review before approval. This means that if anyone is an expert on the AP, it is your teacher.

If you have a question and your teacher is not available, the internet is the next obvious resource of your questions being answered. You should participate in forums with other students that are taking the exam. In return, you can answer questions that you may know but your peers will not. It's like a dynamic study group set up all over the country!

All of these skills should be practiced and utilized when [studying for and taking the macroeconomics exam](#). These skills are not just useful for this exam, but also any other exam you take along with macro.

Benefits

Macroeconomics is probably one of the few AP exams that are directly applicable to real life. You can also see its effects in real time. For example, if the unemployment rate is high and the president is trying to enact policies based on that rate, you can draw your conclusions of those policies based on what you learn in AP Macro. The following are some real world applications and benefits from taking AP Macroeconomics.

College Credit

If we're being honest, this is probably the prime reason anyone takes an AP exam. The macroeconomics exam is no different. In general, most schools require a score of 4 in order to gain college credit in class. The reason for this higher required score is most likely because macroeconomics is such a wide reaching area of study. This means some level of expertise is necessary to pass the exam and gain credit to get out of the college-level economics course.

Is AP Macroeconomics Hard? Cont.

Political Participation

If you're a senior taking this exam, you are probably moving into your first election in which you can vote. Regardless of voter eligibility, macroeconomics rules the world and the government's economic policy. Developing a clear understanding of economics will help you determine who you want to support politically, based on what benefits are reaped from whatever policies are being considered.

Macroeconomics can also be used to discuss the various economic crises throughout the world. The Great Recession of 2008, for example, is the direct effect from mismanaged fiscal policy that is learned in a macroeconomics course.

These are just three practical applications of learning macroeconomics. The AP macro test may seem daunting, but learning the subject can bring about real results that will affect your day to day life. This is something unique within the list of AP exams.

Next Steps

After taking the above into consideration, you may be wondering how to move on and take the exam. While studying and going to class are important, there are a few steps you have to take outside of that in order to be able to take the AP exam.

Create a CollegeBoard Account

If you haven't already, it is absolutely necessary to go to the CollegeBoard website and create an account. You will use this website to create your username that you will use for the test as well as view your scores after the tests have been graded.

Look for a Study Guide

[Study guides are essential](#) to getting the knowledge and practice for getting a passing grade on the AP exam. An AP Macroeconomics review is especially important for those who are taking the test late. There is a huge range of study guides on the internet, some of which are ineffectual while others are probably as good as taking a class. If you have the means it can be helpful to purchase multiple study guides to practice regularly.

Is AP Macroeconomics Hard? Cont.

Take Past Exam Questions

The CollegeBoard and other websites usually posts previous responses to free response questions online. While questions never repeat, these will help you time yourself when organizing your answer as well as develop a grasp of what might be asked on the exam and the overall format of the questions. The questions usually follow the same formats.

Here is a shortened version of a [typical free response question](#):

1. Consider that the United States economy is currently in a long-run equilibrium with the actual unemployment rate above the natural rate of unemployment.

- (a) Draw a graph that is correctly labeled with both the long-run [Phillips curve](#) and short-run Phillips curve and label the correct long run equilibrium as P.*
- (b) If policy actions are taken to improve employment levels, will the short run Phillips curve shift to the right (upward), shift to the left (downward), or remain the same in the short-run? Explain.*
- (c) If the Federal Reserve Bank wants to lower unemployment, what monetary policy should it use to exact those changes?*

Note that this question should be answered in the format it was given, meaning you should answer each part as listed in the question.

AP Macroeconomics sounds like a dreaded exam that is complex and requires years of study in order to have the correct knowledge. However, you should always realize the difference between theory and practice. Studying the theory of Macroeconomics is a lot easier than actually implementing those theories in practice. These theories are easy to understand, and have actual benefits in the long run. You should consider taking the AP Macro exam not only for college credit, but also the added benefit of personal knowledge.

Production Possibilities Curve (PPC)

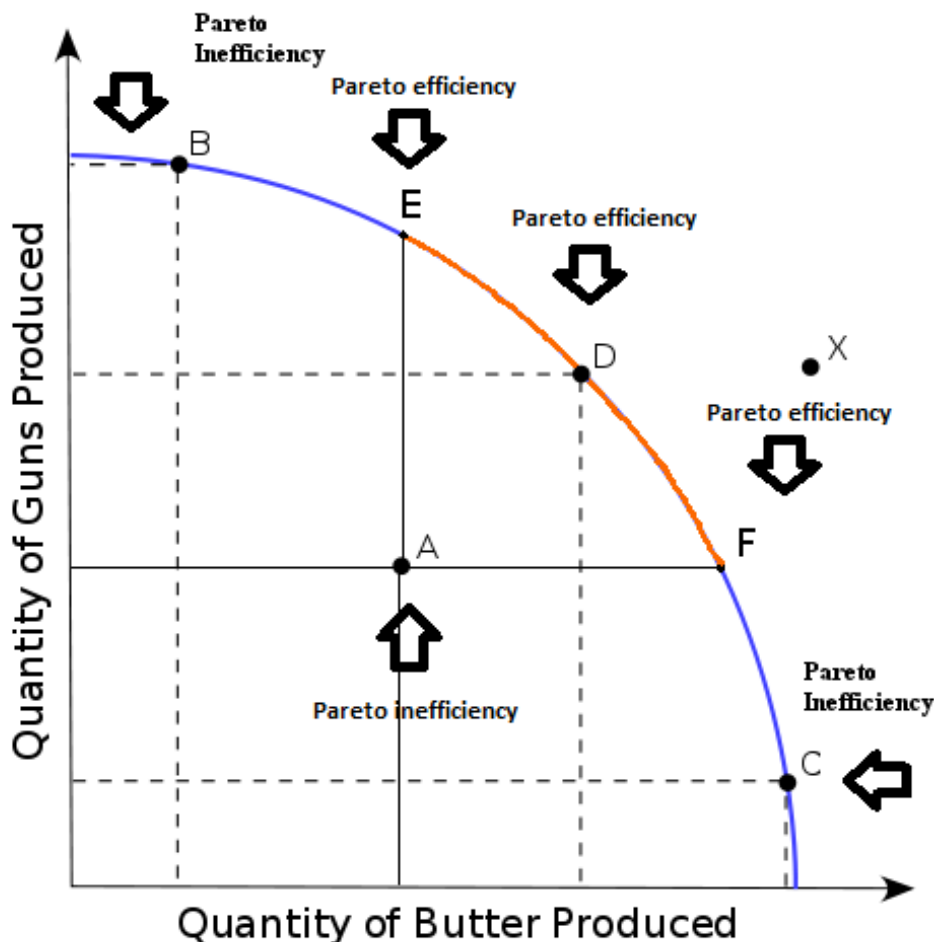


Image Source: Wikimedia Commons

So you've started studying for the AP Microeconomics and AP Macroeconomics exams, and you want to know what's essential for your AP Economics review. In that case, the production possibilities curve, sometimes called the production possibilities frontier, is a concept that you've got to know!

Production Possibilities Curve (PPC) Cont.

Introduction to Production Possibilities Curve

So what is the production possibilities curve? The PPC curve is a way to represent the different production opportunities for a person, country, or trading partners. The production possibilities curve is a crucial part of any AP Economics review for a couple of reasons. First and foremost, you'll definitely need to master this concept if you want to ace your AP Microeconomics or AP Macroeconomics exams, of course! Beyond that, the PPC curve gives you an opportunity to make sure you've got a handle on some important economics subjects, such as opportunity costs and efficiency. In this post, we'll build our understanding of the production possibilities curve from the ground up and work through some practice questions together; so let's get started!

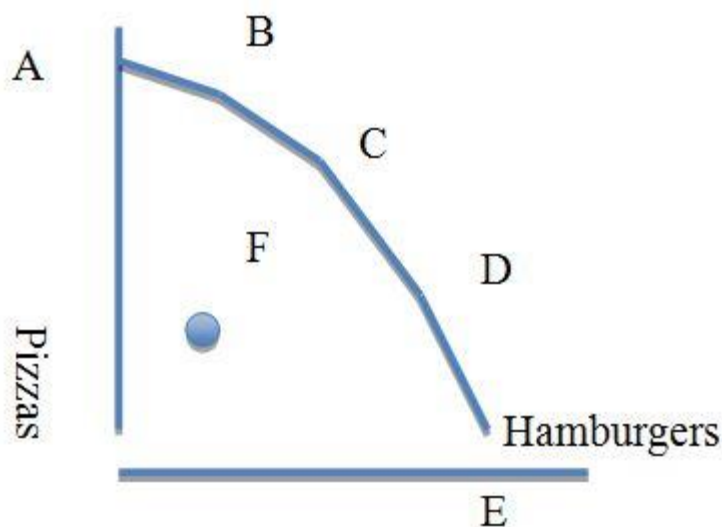
A Simple Example

We'll start by working out what exactly a production possibilities curve is by thinking through a simple example. It's easiest to start by thinking about the production possibilities available to any person, like you or me. For example, during the day, I can make pizzas or hamburgers, and I only have so much time. This means I may have a set of production possibilities that looks like the following table:

	A	B	C	D	E
Pizzas	32	30	25	15	0
Hamburgers	0	5	8	10	11

Production Possibilities Curve (PPC) Cont.

Now that we know exactly what my production possibilities are, we can create the PPC curve by graphing these points.



Hey! Where did point **F** come from? For now, ignore **F**, but we will come back to it when we discuss efficiency.

This outward bowed PPC should look roughly similar to the graph at the beginning of this post. We can see that the graph of the production possibilities curve in our simple example demonstrates visually the different production opportunities that are available to me, depending on the length of time I want to spend making either pizzas or hamburgers. Now that we've seen how to put together a simple example, let's find out what makes this concept so relevant to studying for AP Microeconomics and AP Macroeconomics!

Production Possibilities Curve (PPC) Cont.

What's so Important About the PPC?

Knowing the production possibilities curve is key to your AP Economics review because it brings together a number of economic concepts. In particular, the PPC curve demonstrates scarcity, trade-offs, opportunity costs, and economic efficiency. To illustrate, let's look at each of these concepts in the context of our simple example.

First, how does the PPC curve demonstrate scarcity? In this case, the scarce resource is the number of hours in a day available to me. I can spend my entire day making 32 pizzas, but this means that I will have no more time available to make a hamburger. Because there are only so many hours in a day, as I spend more time focusing on making pizzas, I simply cannot make as many hamburgers. That's scarcity!

Likewise, the production possibilities curve demonstrates the vital economic concept of trade-offs. Because time is a scarce resource, when choosing to make more hamburgers or more pizzas, I have to consider the inherent trade-off created. Let's say that I'm spending all of my time making hamburgers. The PPC curve shows us that if I spend my entire day making hamburgers, I can make 11 of them. If I'm willing to make 1 less hamburger though, the PPC shows that I could make 15 pizzas. So, we can see the trade-off that is inherent to the last hamburger I decide to make—namely, I give up the 15 pizzas that I could have made.

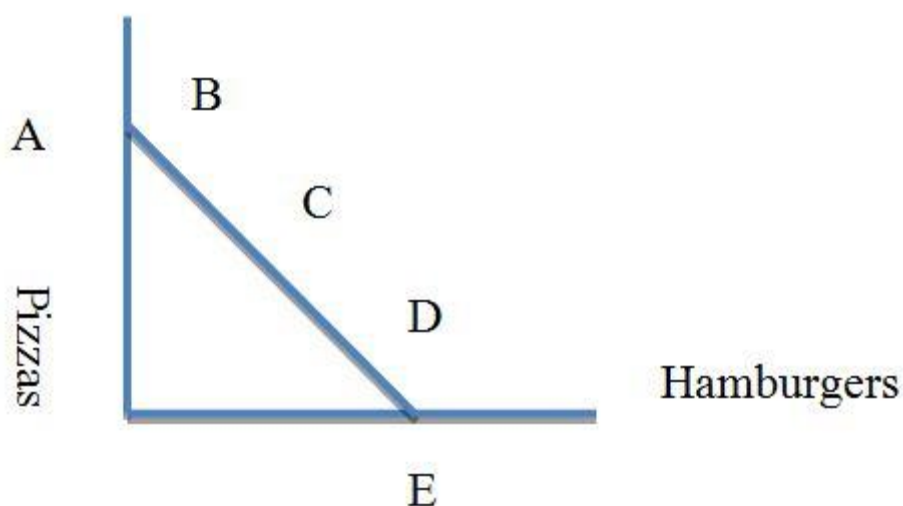
The combination of scarcity and trade-offs brings us to opportunity costs. Opportunity costs are key to understanding both AP Microeconomics and AP Macroeconomics, and the production possibilities curve lets us clearly visualize them. In this example, my opportunity costs are what I give up in order to produce more pizzas or more hamburgers. To highlight this, consider moving from **C** to **D** and then from **D** to **E**. To move from making 8 hamburgers to 10 hamburgers, I have to give up 10 pizzas. Then, moving one step further, from 10 hamburgers to 11 hamburgers means that I have to give up 15 pizzas. I'm giving up more pizzas to move from **D** to **E** than I did from moving from **C** to **D**, even though I'm making fewer hamburgers. Economically, my opportunity cost of making hamburgers is rising.

Production Possibilities Curve (PPC) Cont.

Working through this example shows that the PPC curve can also tell us the difference between increasing opportunity costs and constant opportunity costs. As we just saw, reading our simple example's production possibilities curve allowed us to visualize increasing opportunity costs. However, suppose that my set of production possibilities instead looked like this:

	A	B	C	D	E
Pizzas	8	6	4	2	0
Hamburgers	0	1	2	3	4

Then we could again graph the production possibilities curve this creates:



What's the difference between this PPC curve, and our initial PPC curve? This one graphs a straight line! This linearity that we are noticing is the difference between increasing opportunity costs and constant opportunity costs.

Production Possibilities Curve (PPC) Cont.

In our initial example, if I wanted to continue to increase the number of hamburgers I was making, I had to give up more and more pizzas (i.e. increasing opportunity costs). In this example, every time I decide I'd like to make another hamburger, it means I have to give up making 2 pizzas. This means that my opportunity costs are constant since I am always giving up 2 pizzas to make another hamburger.

Finally, the production possibilities curve also demonstrates efficiency, in particular, productive efficiency. Productive efficiency means that we are producing each of the goods in the least costly way. How can we see that on our PPC curve? Let's go back to our very first example. Remember that point **F**? The point **F** allows us to highlight the difference between a productively efficient and productively inefficient allocation. If I'm producing at point **F**, I'm simply not making good use of my time. At point **F** I'm making 8 hamburgers and only 15 pizzas, but we know that if I was producing my goods in the least costly way, I could produce up to 25 pizzas. This is saying that point **F** is an inefficient allocation, while the points on our production possibilities curve are all efficient. By making only 8 hamburgers and 15 pizzas, I'm simply wasting some of my scarce resources, time. If I instead produce the good in the least costly way, by focusing and not wasting some of my time, I could be producing efficiently, and when I do so, I'll be making 25 pizzas to go along with my 8 hamburgers.

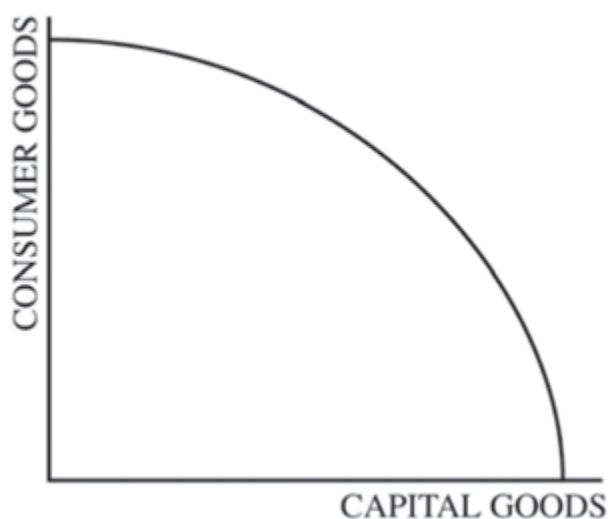
What if there was a point beyond our PPC curve, for instance, 8 hamburgers and 30 pizzas? Well, I simply can't make that many pizzas if I'm already producing 8 hamburgers, I just don't have the time! This point is unattainable.

Production Possibilities Curve (PPC) Cont.

OK, but what about the AP Macroeconomics or AP Microeconomics Exam?

We've built up a simple example of the production possibilities curve and have a good understanding of why it's so important, but what about the AP Macroeconomics and AP Microeconomics exams? For the last part of this AP Economics review, we'll work through a free response question. This practice will allow you to apply the concepts you've learned about the PPC curve, as well as illustrate how you could be tested on the PPC on an AP Macroeconomics or AP Microeconomics exam. The following question is taken from the [2013 AP Macroeconomics Free Response Questions](#):

“Assume that the country of Fischerland produces only consumer goods and capital goods.”



Given this production possibilities curve for Fischerland, we are first asked which goods exhibit increasing opportunity costs. Thinking back to our original simple example, we note that this graph exhibits the same bowed-outward shape.

Production Possibilities Curve (PPC) Cont.

First, consider consumer goods. As we move closer to the consumer goods axis, notice that we have to give up more and more capital goods to get closer. Likewise, as we move closer to the capital goods axis, we see that it takes giving up more and more consumer goods to get there. This means that both consumer goods and capital goods exhibit increasing opportunity costs. In each case, as we produce more of one good, we have to give up increasing amounts of the other!

Next, we are asked to plot a point where the economy of Fischerland is fully employed and efficiently using its resources. Thinking back to the concepts inherent to the production possibilities frontier, where were the efficient allocations? They were those points that were exactly on our PPC curve! So like our first example, we would simply plot a point exactly on Fischerlands PPC curve!

Finally, what about if a recession occurs in Fischerland? This means that instead of the economy of Fischerland being efficient, it is now inefficient. Thinking back to what we've learned, that's any point where the economy isn't producing as much as it could. So like our simple example, we plot a point that is inside the production possibilities curve!

Conclusion

The production possibilities curve is a vital economic concept for the AP Microeconomics and AP Macroeconomics exams. In this post, we've built our understanding of the PPC curve from the ground up and applied it to a free response question. With knowledge of the production possibilities curve, you'll be able to visualize economic concepts ranging from scarcity and trade offs to opportunity costs and efficiency—all of which are critical concepts in any AP Economics review! Can you think of some interesting examples of production possibilities?

Absolute vs. Comparative Advantage

Amount produced in 12 hours

	Ketchup	Mustard
Bob	6 bottles	3 bottles
Tom	12 bottles	4 bottles

If you've started studying for the **AP Microeconomics or AP Macroeconomics exam**, then you'll need to know the essential concepts. One of the most important distinctions you'll come across in your studies is absolute vs. comparative advantage. So what's the difference between these two concepts? And why are they so important? That's what you'll learn in this post as we review absolute vs. comparative advantage!

First, let's jump straight into the definitions, and then we'll take a step back to break each concept down and build our intuition.

Absolute vs. Comparative Advantage Cont.

Definitions of Absolute vs. Comparative Advantage

Absolute advantage refers to the person or country who can produce a good or service for the least resource cost.

Comparative advantage refers to the person or country who can produce a good or service for the lowest opportunity cost.

A Simple Example

All right, so there are costs associated with both of these, but what do we mean by costs? The cost associated with absolute advantage is the type of cost we're used to thinking about. For instance, say in one hour Bryan can chop 20 pieces of firewood, while Rick can chop 10. Casually, you'd think to yourself *Bryan's better at chopping firewood*. But in economic terms, you'd also think, *Bryan has the absolute advantage at chopping wood*.

So what's the difference between resource cost and producing a good or service at the lowest opportunity cost? The difference between opportunity and resource cost is what underpins the difference between absolute vs. comparative advantage. Rather than the resource cost for someone to produce a good or service, the opportunity cost is how much someone gives up to produce a good or service. That is, what was the person's next-best option?

To build on our intuitive example, let's extend our camping story a bit further than just chopping wood. Bryan and Rick will also need a tent to sleep in. Suppose that it would take each one of them one hour to pitch a tent alone. Who has the comparative advantage in pitching tents? To find that, we need to find who has the lower opportunity cost for pitching a tent.

In our example, what Bryan gives up, his next-best option, is that he could have chopped 20 pieces of firewood. For Rick, he could have chopped 10 pieces of firewood. If Rick spends his hour pitching a tent, he's giving up less than if Bryan were too. So Rick has the comparative advantage in pitching tents because he has the lowest opportunity cost, because he gives up the least.

Absolute vs. Comparative Advantage Cont.

The Importance of Absolute vs. Comparative Advantage

So, what exactly makes absolute vs. comparative advantage so important? Aside from their importance in your [AP Macro](#) or [AP Micro review](#), that is.

What we'll see is that these concepts set the stage for why people would trade in the first place. Why we wonder, would someone who is just *better* at producing everything ever want to trade instead of simply taking the time to produce it themselves? The answer, which we will see as we consider some free response questions, is comparative advantage.

In essence, what we're wondering about is the difference between absolute vs. comparative advantage. And this concept extends further than just why individuals would decide to trade, or how Bryan and Rick divvy up their tasks! By understanding absolute vs. comparative advantage, we'll be able to understand both why countries would trade with each other and the patterns of trade we can expect to see. Understanding comparative advantage will be key to seeing how trade can benefit both parties!

These concepts are not only crucial for acing your AP Micro or AP Macro exams, but also for setting a foundation from which to begin your AP Economics review!

Unpacking a More Complicated Example

OK, so now you've got the intuition down, and you know why absolute vs. comparative advantage is such an important concept for your AP Economics review. But what you're here for is [AP Macro review](#) and [AP Micro review](#), and that means that you also want to know how absolute vs. comparative advantage is likely to show up on the test.

First, you'll need to be able to answer questions about tables, like this, taken from the [2016 AP Macroeconomics exam](#):

Absolute vs. Comparative Advantage Cont.

The following table shows the number of donuts or cupcakes that John and Erica can each produce in one day.

	Donuts	Cupcakes
John	200	100
Erica	150	50

Let's work through this example step-by-step.

First, who has the absolute advantage in donuts and cupcakes? We see that John can produce more of both products in a day, meaning that John has the absolute advantage in donuts as well as in cupcakes. How about the comparative advantage? Who has the comparative advantage in producing donuts? For that, we first need to figure out the opportunity cost of producing a donut.

That is, what does each person give up to produce each donut? In a day, John can make 200 donuts or 100 cupcakes, which means that in the time it takes John to make one donut, he could have made $\frac{1}{2}$ of a cupcake. We find this by taking the ratio of how many cupcakes he can make in a day (100) to how many donuts he could make in a day (200). And just like that, we have the opportunity cost. The opportunity cost to John of making a donut is $\frac{1}{2}$ of a cupcake.

But for comparative advantage, we need to know who has the lowest opportunity cost. So we need to repeat this process for Erica: What is Erica's opportunity cost of producing a donut? Following the same steps we used for John, we see that for Erica to make one donut, she must give up $\frac{1}{3}$ of a cupcake.

Comparing the two individuals' opportunity costs, we see that while John is better at producing **both** donuts and cupcakes and, thereby, has an absolute advantage in both, Erica has the lowest opportunity cost of producing a donut (vs. John), and therefore has the comparative advantage in making donuts.

Absolute vs. Comparative Advantage Cont.

But surely John has a comparative advantage in something? Indeed, if we ask who has the comparative advantage in cupcakes, we will find that it's John. For John to make one cupcake, he must give up 2 donuts. While in the time it takes Erica to make one cupcake, she could have made 3 donuts. So John has the comparative advantage in cupcakes.

This comparative advantage sets the stage for John and Erica to specialize and trade! Assume that each specializes in that person's own comparative advantage, so that John produces 100 cupcakes and Erica produces 150 donuts. Now to decide if trading is beneficial, we need to know how many donuts trade for how many cupcakes. Assume that one cupcake can be exchanged for four donuts.

If John always wants to eat 100 donuts, then without trading, he could have used his day to produce 100 donuts and 50 cupcakes. We find this from opportunity costs as well! We know that for every donut John makes, he is giving up making $\frac{1}{2}$ a cupcake. If he makes 100 donuts, he gives up 50 cupcakes from the maximum number he could make in a day. But with trade, there's another possibility for John. He can specialize in cupcakes (since it's his comparative advantage) and make 100 of them. Then he can trade 25 cupcakes to Erica for 100 donuts. That means, with trade, John now has 100 donuts, as he did without trade, but 75 cupcakes! By trading, John can have 25 more donuts! So, for John, trade is surely beneficial!

But at one cupcake for four donuts, this won't be the case for Erica. A quicker way to see this is by comparing opportunity costs to the exchange rate. To make 1 cupcake, Erica gives up 3 donuts. But for Erica, we see trading does not offer a better option since 1 cupcake is traded for 4 donuts.

Absolute vs. Comparative Advantage Cont.

What Can You Expect from a Free Response Question?

So we've seen how absolute vs. comparative advantage can tell us why people would specialize and trade, but what about countries? Let's use another example to apply what we've learned to countries. Consider another free response question, this one from the [2015 AP Macroeconomics exam](#):

Country X and Country Y are trading partners, and both produce furnaces and solar panels. The countries can produce the following amounts using equal amounts of resources.

Country X: 6 furnaces or 8 solar panels

Country Y: 6 furnaces or 12 solar panels

Applying what we did in the last question, we see that while neither country has an absolute advantage in furnaces, Country Y has an absolute advantage in solar panels. What about comparative advantage? We now know that the first step for deciding that is checking for opportunity costs!

The opportunity cost of one furnace for Country X is that they could have made one and $\frac{1}{3}$ solar panels. For Country Y, in order to make one furnace, they have to give up the resources that could have made 2 solar panels.

So who has the comparative advantage in producing furnaces? Country X, precisely because the opportunity cost of producing a furnace is lower for Country X than it is for Country Y.

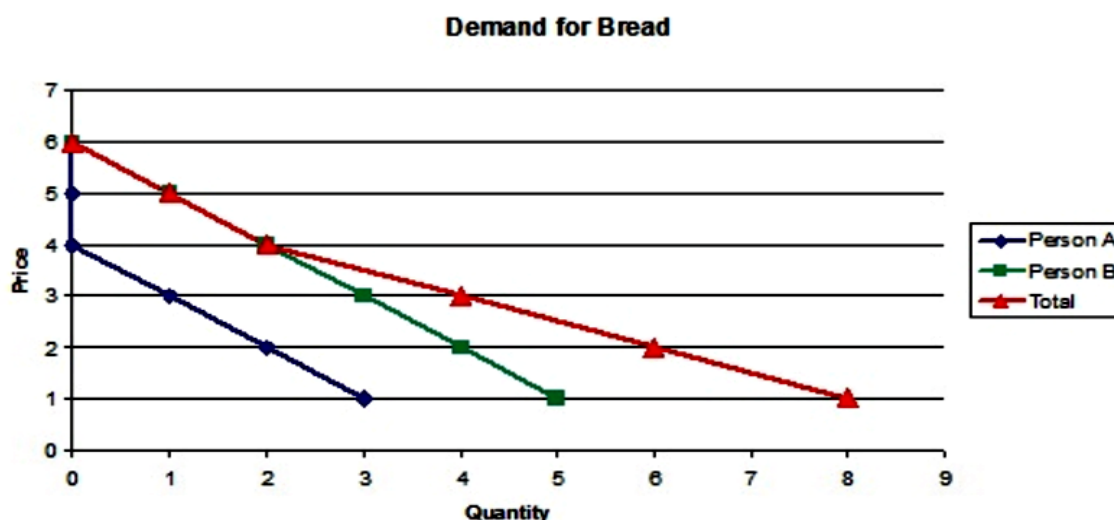
Finally, if two furnaces can be traded for 1 solar panel, should Country X produce the solar panels domestically, or import them from Country Y? As we did with John and Erica's trading, let's break this down in a way that compares to opportunity costs. At this exchange rate, Country X knows that it could trade one furnace for of a solar panel. But domestically, the opportunity cost of that furnace for Country X would be 1 solar panels. So Country X could make more solar panels by shifting resources domestically rather than trying to trade for them at this exchange rate with Country Y.

Absolute vs. Comparative Advantage Cont.

Conclusion

The difference between absolute vs. comparative advantage is one of the most crucial concepts to understand in any AP Economics Review since it forms the building blocks you'll need for both [AP Macro review](#) and [AP Micro review](#). This post helped you understand absolute vs. comparative advantage, which gives you the tools that you need in order to understand trade between persons as well as trade between countries. You can now see both why it can be, and when it will be beneficial for countries or persons to engage in trade. So, how could it be beneficial for a country to trade with another country that is absolutely worse at producing everything?

Aggregate Demand



[Image Source: Wikimedia Commons](#)

If you are an AP Macroeconomics student, there is a 90 percent chance that you will be tested on aggregate demand. In fact, there hasn't been an AP macro exam that has missed out on the topic in the last ten years.

Wouldn't it be amazing if you can have a quick run through on this important subject?

Well, you've found it. This article gives you a precise definition of what is aggregate demand and concisely explains its' components. You will interact with the aggregate demand curve, understand why it is downward sloping and appreciate the elements that cause the curve to shift.

Also, this article helps you prepare for the AP macro exam by reviewing a typical FRQ from past papers and checks out how the concept is applied in the real economy.

Go ahead and run through this amazing crash course review which complements what you've learned from your textbooks and teacher's notes.

Aggregate Demand Cont.

Definition

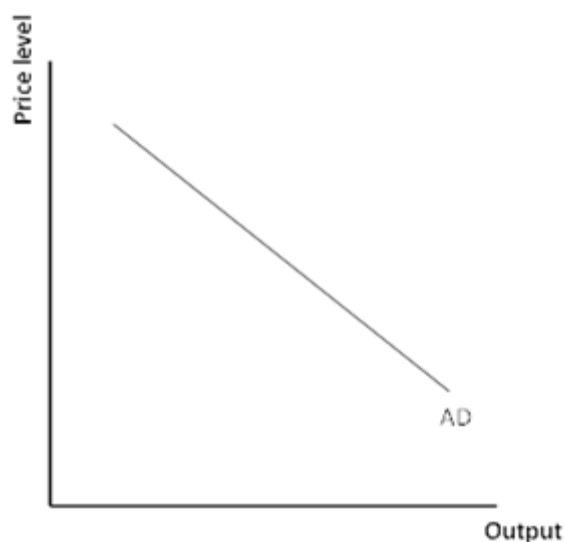
By now you ought to be conversant with the concept of demand as applied in economics. When considering markets and products, demand is the quantity of a commodity that consumers will purchase at a given price. Aggregate demand is developed from this concept. However, it captures a broader perspective of the economy.

The word aggregate means total, aggregate demand, therefore, is the total output of all final goods and services produced in an economy. It represents different output levels at different various price levels and is represented by the sum of all consumer spending (C), business expenditure or investments by business (I), government expenditure (G), and net exports (X_n).

Think about it this way, the device you are using to read this article has only four possible groups of buyers: a consumer, business (for investment), the government or it can be exported to a foreign country.

The Aggregate Demand Curve

Now that you are familiar with what is aggregate demand let's have a look at the graph.



Aggregate Demand Cont.

The aggregate demand curve is a graphical representation of the relationship between quantity demanded and different price levels. The summed components of aggregate demand (C , I , G and X_n) also comprise the real GDP.

Just like the market demand curve which you must have learned earlier, it is assumed that all other factors remain constant (*ceteris paribus*) when drawing it. From the chart, you can see that the aggregate demand curve has a downward slope. This is because the quantity demanded or real GDP has an inverse relationship with the price levels.

Economists use the aggregate demand graph to measure the economy and recommend measures to fix it. The downward slope of the curve enables various economic assumptions to be made thus provide solutions. Let us see why the aggregate demand curve slopes negatively downward from left to right.

Why does the Aggregate Demand Curve Slopes Negatively

There are two reasons as to why the aggregate demand curve has a negative slope.

The Wealth Effect

When price levels are high, people, businesses, governments and foreigners have less money to spend on commodities. Therefore, demand is sunken. Think about it this way, if prices are high, you will have to reduce your consumption level by purchasing fewer items with your cash.

The same idea applies to the greater economy. In such a scenario, policy makers would look into the reasons behind **high prices and seek means to address them while keeping the producers interested in production to spur demand.**

The Interest Rates Effect

When interest rates are high, price levels are high. This is due to an impact on both the supply and demand of loanable funds.

Aggregate Demand Cont.

High prices mean people have less available disposable income which translates to lower savings levels reducing the supply of loanable funds. On the other hand, reduced savings will mean that banks will charge higher interest rates to make good profits. This translates to higher prices for commodities and thus reduced demand.

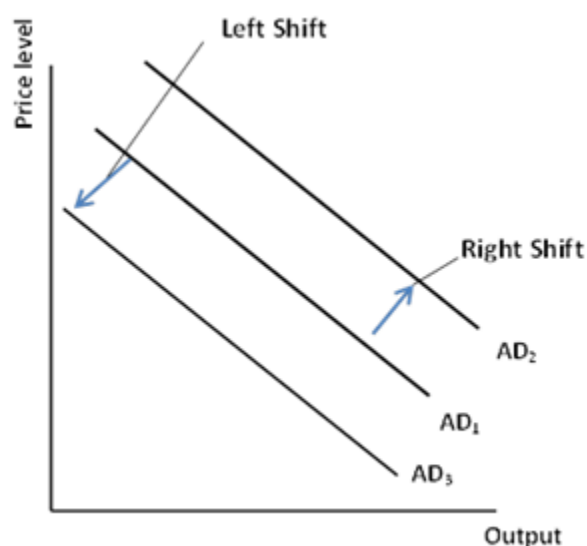
Consider this, if there is a 10 percent increase in the price of gasoline, you will have 10 per cent less disposable income to save. You will also need to increase the usage of your credit card (and by extension the interest paid) by a similar margin.

This inverse relationship between price levels and quantity demanded is captured by the downward sloping nature of the aggregate demand curve. Changes in price and interest rates cause corresponding movements along the curve.

The aggregate demand curve can also shift either to the left or right, below is more on this.

Shifts of the Aggregate Demand Curve

As we mentioned earlier, aggregate demand is the total of all consumption by individuals (C), investments by businesses (I), expenditure by the government (G) and net exports (X_n). When you look at it closely, aggregate demand is the same as real GDP.



Aggregate Demand Cont.

The aggregate demand can move due to growth in demand (shifts to the right) or a decrease (shift to the left).

What Causes these Movements?

Increased Government Spending

When the government increases its spending on purchasing specific commodities such as on agriculture or infrastructure, it results in people having more money and aggregate demand increases and the curve shifts to the right.

Remember, government spending is not the same as increased government expenditure. The latter is considered to cover elements that are not taken into account as part of real GDP such as social security.

A Boom in the Stock Market

A significant boom in the stock market means that people have more wealth at their disposal. Therefore, there is a rise in the consumption levels. Businesses will also respond to the increased demand by spending more on investment and cause an overall growth in the GDP. The aggregate demand curve will shift to the right.

Expectations of future Economic Conditions

People and businesses often make financial decisions based on what is anticipated or a forecast of the economy and future conditions. If there are fears of an impending recession, people will spend less. Businesses will also reduce on investment; therefore, cause a contraction of the real GDP.

This causes a shift of the aggregate demand curve to the left.

Aggregate Demand Cont.

Reduction of Income of Close Trading Partners

The economic growth of the U.S. is linked to the well-being of its close trading partners such as the European Union block. For example, if the Eurozone experiences a recession, it translates to a decrease in their level of income, and they buy less of American produce. This translates to a reduction of the exports from the U.S. to its trading partners and as a result, a contraction of the real GDP.

The aggregate demand curve will shift to the left.

In short, anything that would increase Consumption, Gross Investment, Government spending, or Net Exports will shift the Aggregate Demand (*AD*) curve to the right. A reduction in any of these components will cause the AD curve to shift left.

Preparing for the AP Macro Exam

Questions in the AP Macroeconomics exams are frequently integrated with other concepts that are closely related to aggregate demand such as aggregate supply. Examiners also often focus on the influences of the government and Federal Reserve on the aggregate demand curve.

When the government, through Congress, adopts expansionary fiscal policies such as reducing [taxes](#) or increasing government spending, the effect is shifting the AD curve to the right. Contractionary Fiscal Policy measures such as increased taxation or reduced government spending reduce demand shifting the AD curve to the left.

Both expansionary and contractionary [fiscal policy](#) also affects the loanable funds market and interests rates and eventually affects the long-term economic growth rate.

Aggregate Demand Cont.

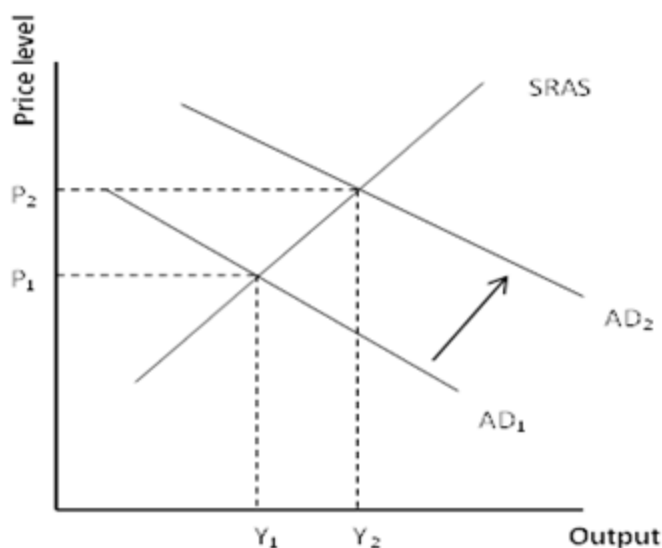
On the other hand, actions by the Federal Reserve in the money market cause shifting of the AD Curve due to variations in the interest rate.

An increase in the money supply levels would reduce interest rates causing the AD curve to shift right. The opposite happens to the interest rates if the Federal Reserve decreases the [money supply](#), shifting AD to the left.

Let's have a look at a previous FRQ from the 2007 exam to better prepare you for the exam.

Assume that New Zealand and Australia are trading partners and that the Australian economy is in recession.

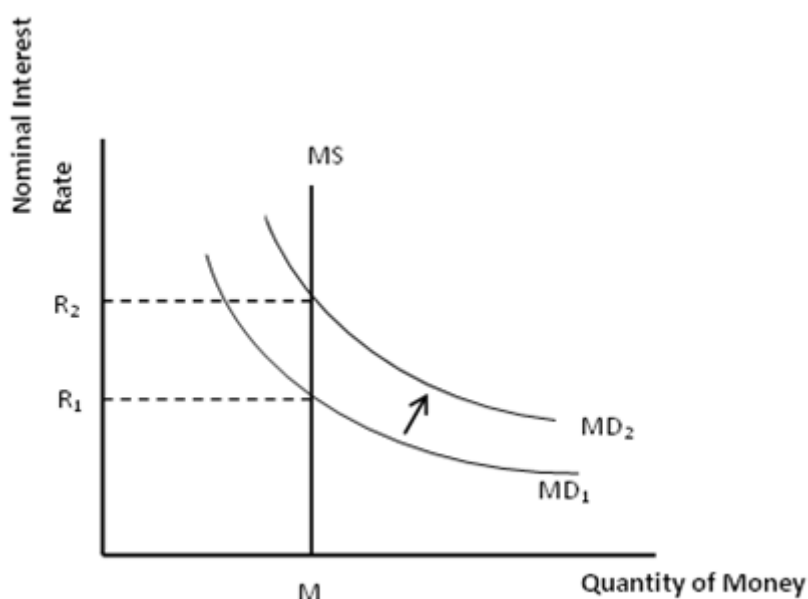
- (a) *If the Australian economy begins to recover, use a correctly drawn and labeled Aggregate Demand and Aggregate Supply curve for New Zealand to show the effect of Australia's rising income on the short run Aggregate demand (explain) and output in New Zealand. (4 points)*



Aggregate Demand Cont.

- A correctly labeled graph earns you one point.
- Showing that New Zealand's AD curve will have a rightward shift earns you one point.
- Explaining that New Zealand's exports to Australia will increase earns you another point.
- Concluding that there will be a rise in New Zealand's output gets you one more point.

(b) Show the impact of the output change in part (a) above on demand for money (explain) and the nominal interest rates using an appropriately labeled money market chart of New Zealand. (4 points)



- A correctly drawn and labeled money market graph has one point
- Showing a rightward shift of the money demand curve gives you another point
- Higher income means more transaction volumes. This explanation earns you one point.
- A conclusion that the nominal interest rate increases will give you one more point.

Aggregate Demand Cont.

(c) Assume that there is a rise in the price levels in New Zealand. With reference to your answer above (in part b), describe what will transpire on the real interest rates. (2 points)

This question has 2 parts to the answer

The real interest rate is indeterminate. The real interest rate is eroded by inflation but increases as a result of increased demand for money.

(d) Despite gaining grounds in economic recovery, Australia remains in recession and its government adopts a no action policy. Indicate what will occur to each of the following curves in Australia.

(i) Aggregate supply.

(ii) Aggregate demand.

Will there be a shift to the right, shift to the left, or remain unchanged in the long run? (2 points)

A right shift of the Aggregate Supply curve will occur. (1 point)

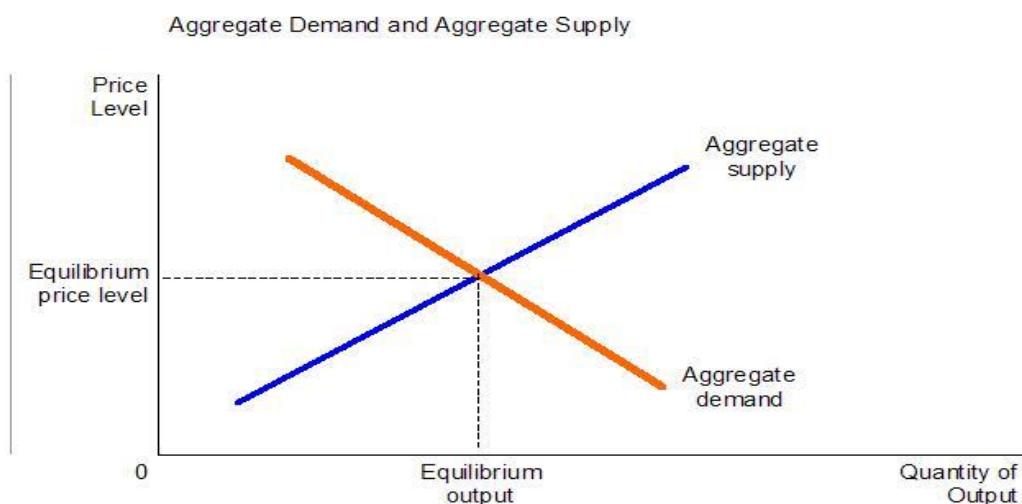
The aggregate demand curve is unchanged. (1 point)

As mentioned earlier and from our sample, questions in the AP macro exam related to aggregate demand are frequently intertwined with other concepts including aggregate supply, money markets, and international trade. Your understanding of the curves and how they relate is crucial.

Conclusion

Aggregate demand is a core concept in AP macro. This crash course review gives you a thorough understanding of the subject and prepares you for this crucial and most commonly examined topic in AP macro.

What Shifts Aggregate Demand and Supply?



[Image Source: Wikimedia Commons](#)

Have you ever calculated how much you spend in a year? The amount of money you spend within a particular period constitutes your total demand. Believe it or not, it contributes to national macroeconomics. When we consider the total expenditure by each person in the entire country (including what is spent by the government and businesses), it is called aggregate demand. On the other hand, aggregate supply is the total value of all goods and services producers are willing to supply in an economy over a specified time at different price levels.

If you are having a hard time understanding these two concepts for your AP Macroeconomics exam, then this article is for you. We will look into the concepts, what shifts aggregate demand and aggregate supply, and why these concepts are important. We will also see how you can be tested on these concepts on the AP exam.

What Shifts Aggregate Demand and Supply Cont.

What is Aggregate Demand and Supply?

Aggregate demand is an economic measurement of the total sum of all final goods and services produced in an economy. It is expressed as the total amount of money paid in exchange for those goods and services and represents different output levels at various prices. It is expressed as the sum of all consumption (C), investments (I), government expenditure (G), and net exports (X_n).

When you take a closer look, aggregate demand is the same as real GDP, especially the long run aggregate demand and is typically depicted by a downward sloping curve. This means that increases in price levels, holding other factors constant (*ceteris paribus*), results in a reduction in the aggregate demand. The slope is downward because of the following effects:

Wealth Effect

Consumer wealth responds inversely to changes in price. At higher price levels or higher interest rates, the purchasing power (or real wealth) of consumers reduces, since they have to spend more to acquire each unit of a commodity.

Savings and Interest Rate Effect

Higher prices not only put a strain on your wallet (consumer wealth), but also cause you to save less. This reduces the amount of money available to banks to lend, and the lenders, in turn, raise interest rates to make an appreciable return. The spiral effect of increased interest rates is a reduction in investments (entrepreneurs are less willing to borrow to expand their businesses) and a dip in consumer spending (fewer people take mortgages or car loans and spend less using their credit cards).

What Shifts Aggregate Demand and Supply Cont.

Exchange Rates Effect

An increase in price also makes people prefer to purchase foreign products since they are cheaper compared to local goods. This drives the market to demand more foreign currency, causing a weakening of the dollar and a reduction in exports, which drives the real GDP down further.

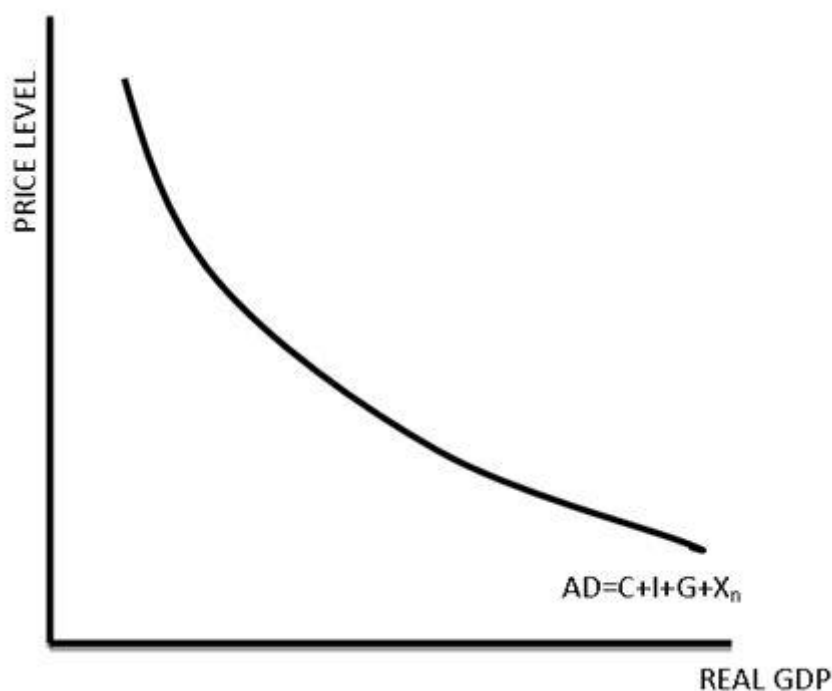


Figure 1: Aggregate Demand (AD) Curve

Now that you have a firm picture of aggregate demand, let's look at the supply side. Aggregate supply refers to the total amount of goods and services that producers are willing to supply within an economy at a given overall price level. An aggregate supply curve indicates the connection between different price levels and the amount of real GDP supplied and it is represented by an upward sloping curve.

What Shifts Aggregate Demand and Supply Cont.

To correctly understand the aggregate supply curve, time is an essential factor. In the short run, rising prices (*ceteris paribus*) or higher demand causes an increase in aggregate supply. Producers do this by increasing the utilization of existing resources to meet a higher level of aggregate demand. The term “short run” indicates a time frame in which prices of some resources remain “sticky” and the real GDP is not necessarily equal to the potential GDP or full employment GDP.

However, long run aggregate supply is not affected by price, but by the number of laborers, capital stock available, and level of technology. In the long run, the prices of resources necessary for production are considered variable, and real GDP is equal to the potential GDP. Thus, the long run aggregate supply curve is almost vertical. This depicts that supply is inelastic to price level changes since all factors of production are considered flexible.

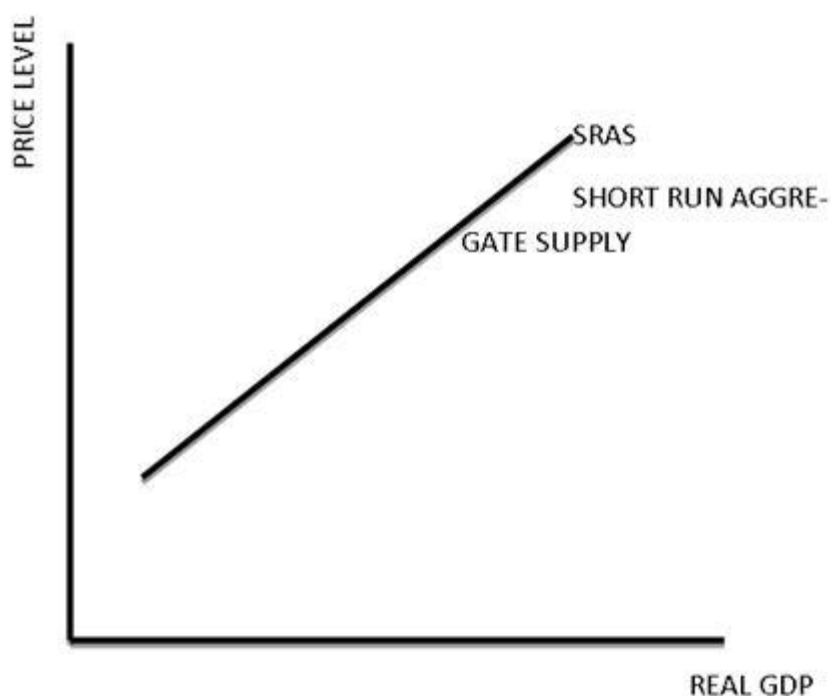


Figure 2.1: Short Run Aggregate Supply (SRAS)

What Shifts Aggregate Demand and Supply Cont.

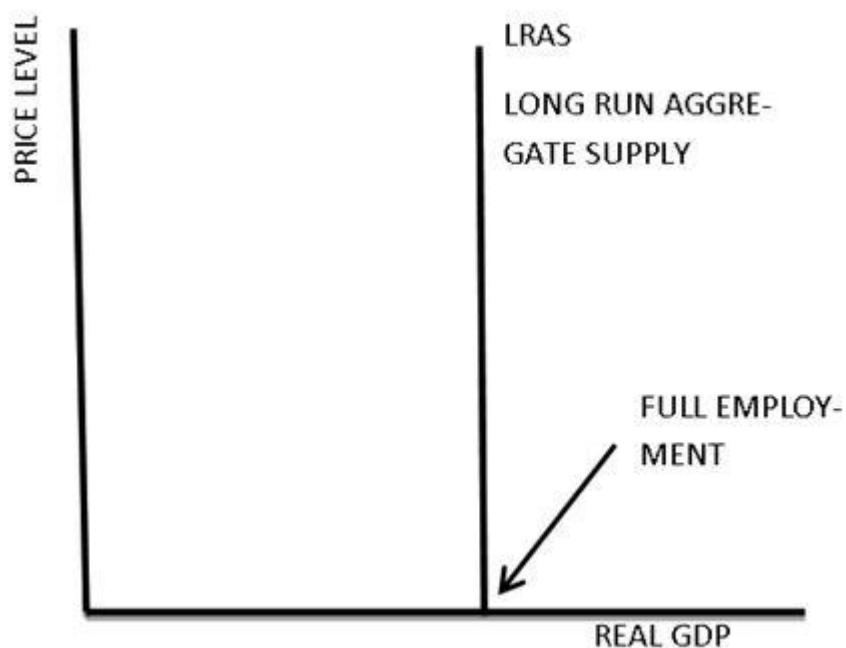


Figure 2.2: Long Run Aggregate Supply (LRAS)

Changes in price levels, holding other things constant (*ceteris paribus*), causes movements along both aggregate demand and aggregate supply curves. However, other factors can shift aggregate demand and aggregate supply curves—let's have a look.

What Shifts Aggregate Demand?

Changes in the principal components of aggregate demand (i.e. $C + I + G + X_n$) primarily constitute what shifts aggregate demand.

What Shifts Aggregate Demand and Supply Cont.

Below is a graphic illustration of shifts in the Aggregate Demand curve.

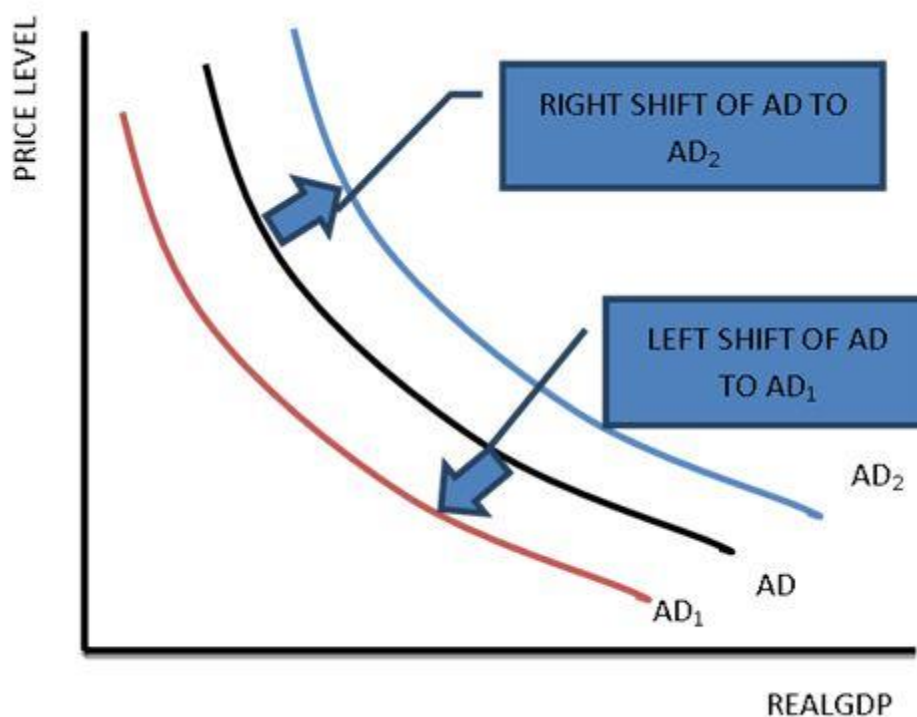


Figure 3: Shifting Aggregate Demand curve

Let's dive a little deeper to what shifts aggregate demand.

Expectations

Expectations of higher [inflation](#), higher future income, or greater profits will typically drive consumer spending and investments up. This causes an increase in the real GDP, which shifts aggregate demand to the right (AD_2). The opposite is true when consumers and businesses expect a recession; the GDP reduces and shifts aggregate demand to the left (AD_1).

What Shifts Aggregate Demand and Supply Cont.

Government Fiscal and Monetary Policy

Fiscal policy is when the government attempts to influence the economy by changing taxation or government spending. Congress supervises this role, and it shifts aggregate demand by manipulating consumer wealth. Here's how:

A reduction in taxes or an increase in transfer payments causes an increase in consumer wealth and investments, driving the real GDP up and in turn shifting aggregate demand rightward to AD_2 . The same effect is felt when the government increases its spending on something like healthcare. On the other hand, when the government increases taxes or reduces expenditure, consumer wealth decreases, which contracts the real GDP and shifts the aggregate demand curve to the left to AD_1 .

The monetary policy applies when the government attempts to change the level of money circulating in the economy by influencing interest rates. The Federal Reserve Bank usually performs this function. When interest rates rise, the exchange rates are affected, the dollar strengthens against other world currencies, local products increase in price, and investment and consumer spending diminish. Thus, aggregate demand is suppressed and shifts the aggregate demand curve to the left to AD_1 .

Changes in Foreign Trade

An increase in net exports at any given price level shifts aggregate demand rightward to AD_2 . The following three main factors influence net exports: First, if local firms and households purchase more foreign goods than local ones either due to better price or availability, net exports will fall, thus shifting aggregate demand to the left to AD_1 . If the opposite happens, it shifts aggregate demand to the right to AD_2 .

- Second, if the exchange rates favor the dollar considerably compared to other world currencies, net exports will fall, thus shifting aggregate demand to the left to AD_1 .

What Shifts Aggregate Demand and Supply Cont.

- Third, if the real GDP of the U.S. grows at a much faster rate than other countries', the dollar will strengthen and net exports will fall, shifting aggregate demand to the left to AD_1 .

Changes in Productivity

When producers employ better organization management strategies or improved technology, it enables more efficient production and enhances the quality of products. This, in turn, encourages investments and boosts exports. Thus, aggregate demand shifts to the right to AD_2 .

What Shifts Aggregate Supply?

Shifts in the short run aggregate supply curve are caused by changes in inflationary expectations; changes in worker force and capital stock availability; changes in government action (not the same as government expenditure); changes in productivity; and supply shocks.

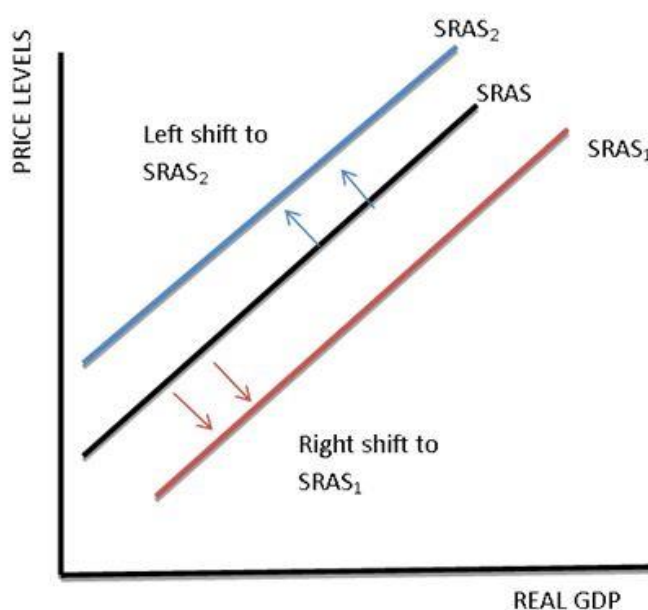


Figure 4.1: Shifting Short Run Aggregate Supply

What Shifts Aggregate Demand and Supply Cont.

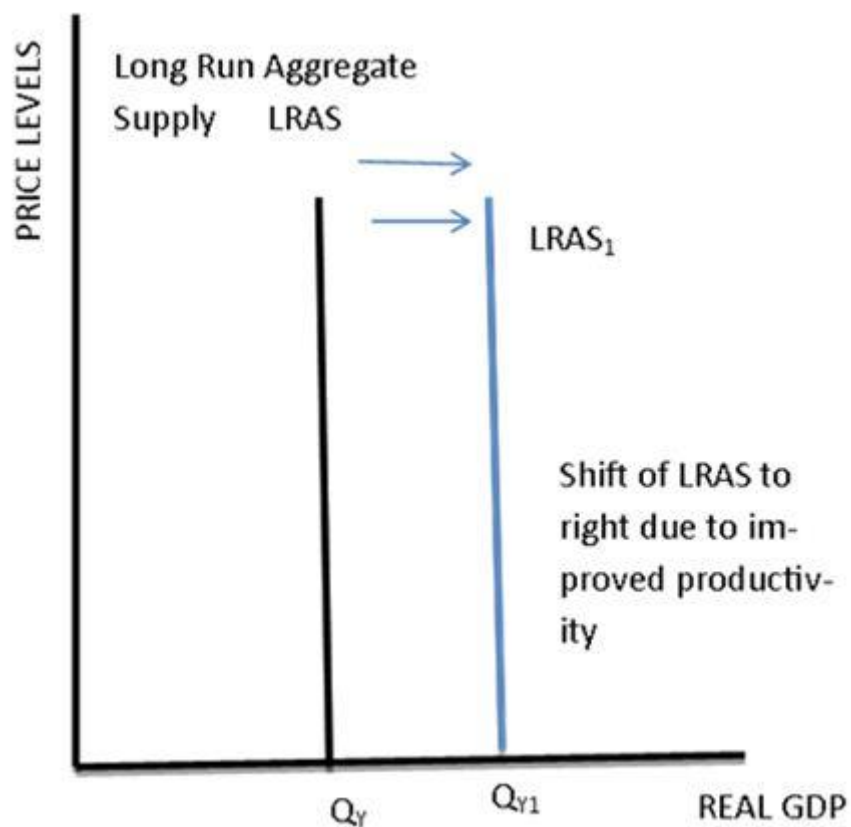


Figure 4.2: Shifting Long Run Aggregate Supply

Changes in Inflationary Expectations

If firms and workers expect the prices to rise, the short run aggregate supply will shift to the left to $SRAS_2$.

Changes in the Labor Force and Capital Stock

As the labor force and capital stock increase in availability, aggregate supply increases at every price level, shifting aggregate supply to the right to $SRAS_1$.

What Shifts Aggregate Demand and Supply Cont.

Changes in Government Action

For example, adopting policies that impose heavy [taxes](#), remove subsidies from local production, or impose restrictive regulations can shift aggregate supply in the short run to the left ($SRAS_2$). The opposite happens when the government adopts policies that reduce the tax burden on producers, subsidizes local production or removes restrictive regulations, shifting aggregate supply to the right ($SRAS_1$).

Positive Institutional and Technological Changes

Such changes enable producers to supply more products at reduced costs. Thus, more output is available at every price level, shifting aggregate supply to the right to $SRAS_2$.

Supply Shocks

Unexpected hikes in prices of necessary resources or a sudden shortage occasioned by an uncontrollable event, such as natural calamities, can shift aggregate supply to the left in the short run to $SRAS_1$.

A shift in the long run aggregate supply curve is mainly caused by technological innovations and changes in the size and quality of labor. As the economy becomes driven by more efficient technology, and the number and quality of laborers improve, producers are willing to supply more at every given price level. This shifts the long run aggregate supply curve to the right to $LRAS_1$.

Long Run Macroeconomic Equilibrium is the meeting point of the three curves: short run aggregate supply, aggregate demand, and the long run aggregate supply curves.

What Shifts Aggregate Demand and Supply Cont.

P_e and Q_y represent the equilibrium price level and full employment GDP.

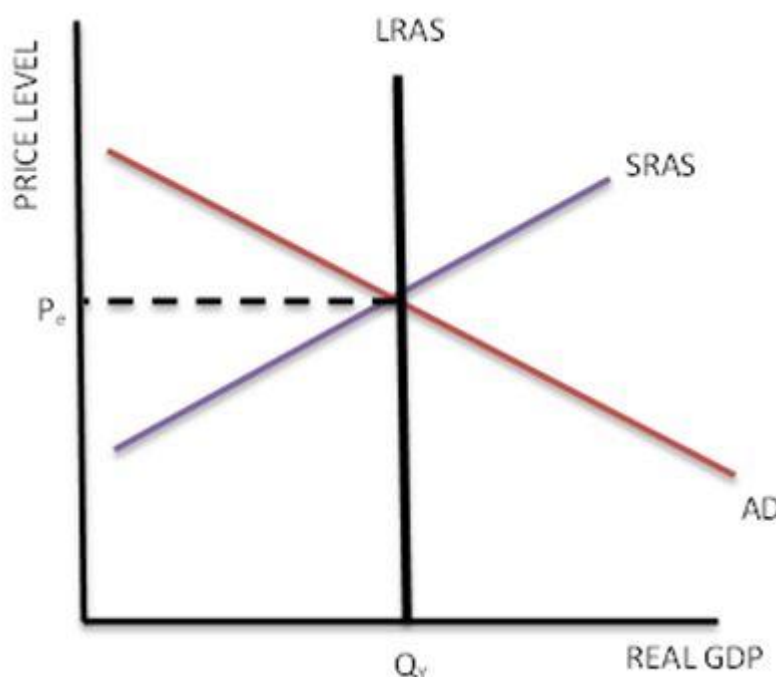


Figure 5: Long Run Macroeconomic Equilibrium

Macroeconomics Schools of Thought

The Keynesian theory advances the argument that aggregate demand is influenced by a combination of numerous economic decisions at both public and private levels. According to this theory, changes in aggregate demand influence real output and employment more than prices would affect real output and employment.

Keynes' theory advances the notion that future economic production is propelled by aggregate demand and that during a depression, an economy must be stimulated by the government in the form of fiscal and [monetary policy](#). In this theory, not only are the cost of resources "sticky," but prices are also "sticky" in the short run due to firms being caught in fixed price contracts.

What Shifts Aggregate Demand and Supply Cont.

Classical theory advances the argument that an economy is self-controlling and is capable of attaining the potential GDP or full employment. It alludes to the opinion that while circumstances exist that would cause an economy not to operate at the potential GDP (full employment), self-adjusting mechanisms will enable the economy to resume the potential GDP. This theory suggests that economic downturns should be mild and brief, and that the economy always operates near full employment based on two principle beliefs: the belief that prices, wages, and interest rates are always flexible and Say's Law.

Briefly, Say's law states that when an economy generates a particular level of real GDP, it correspondingly produces an income sufficient to purchase that level of real GDP.

Why are Aggregate Demand and Aggregate Supply Important?

As you can see from our discussions on aggregate demand and supply, their curves, and what shifts aggregate demand and supply, this topic is the bedrock of macroeconomics. From these concepts, economists derive other important macroeconomic topics, such as taxation, international trade, and exchange rates. Governments can take measures to influence investments, interest rates, and consumer spending to ensure that the economy stays on the right path.

This topic has also been a focal point for AP Macroeconomic examinations. In fact, going by previous examinations, there's over a 90% chance that you will be examined on it.

To prepare for the AP Macroeconomics Exam, first, you need to be familiar with AP-level material, have a good understanding of the exam structure, and refer to multiple sources of information, as well as what has transpired on previous examinations. A look at our previous post on the [Ultimate List of AP Macroeconomics Tips](#) as well as the [CollegeBoard's Essential Macroeconomics Exam Tips](#) will catapult you to a whole new level of preparation.

What Shifts Aggregate Demand and Supply Cont.

It is important that you get a firm grip on this concept and the curves involved. To help you with this, let's take a look at an FRQ from the 2015 exam.

Assuming that the U.S. economy is running at below potential GDP (below full employment):

(a) Sketch a graph with clear labels showing the following curves:

- i) Long run aggregate supply (LRAS).
- ii) Short run aggregate supply (SRAS).
- iii) Aggregate demand (AD).

On the graph, identify the present equilibrium output (label it as Y_1) and price level (label it as PL_1), and the point of full-employment GDP (label as Y_f).

A correctly drawn graph showing Aggregate Demand (AD), Short run Aggregate Supply (SRAS), Equilibrium output (Y_1), and Equilibrium price level (PL_1), as shown below, would earn you two marks. You will be awarded one extra mark for drawing an upright Long Run Aggregate Supply (LRAS) at the point of full employment GDP (Y_f), which is to the right of Equilibrium output (Y_1).

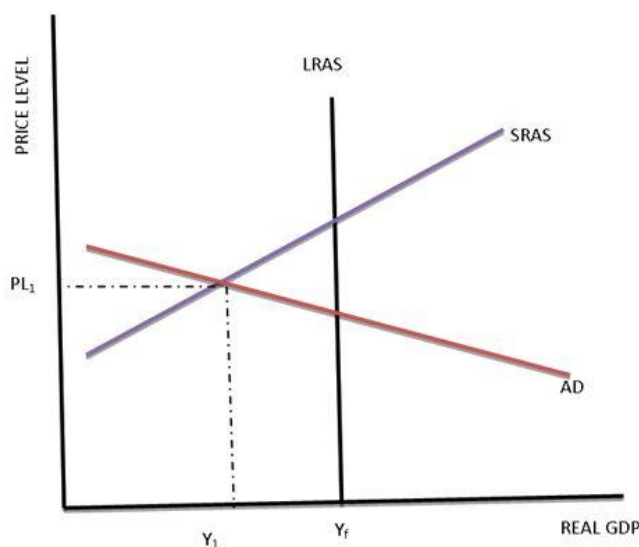


Figure 6: AD, SRAS and LRAS curves showing PL_1 , Y_1 , and Y_f

What Shifts Aggregate Demand and Supply Cont.

(b) The Federal Reserve has sought your advice on setting a new federal funds rate to get the economy on track to reach full employment. Should the Federal Reserve aim at a higher or lower federal funds rate?

A simple response stating that the Federal Reserve should target a lower federal funds rate earns you one mark.

(c) Justify your advice in (b) above, and sketch a money market graph which shows the impact of your recommendations on the nominal interest rate.

A correctly drawn and labeled money market graph would earn you one mark (see Figure 7).

On the money market graph, showing a shift to the right in the money supply curve (MS_2) caused by the decrease in the nominal interest rate earns you another mark.

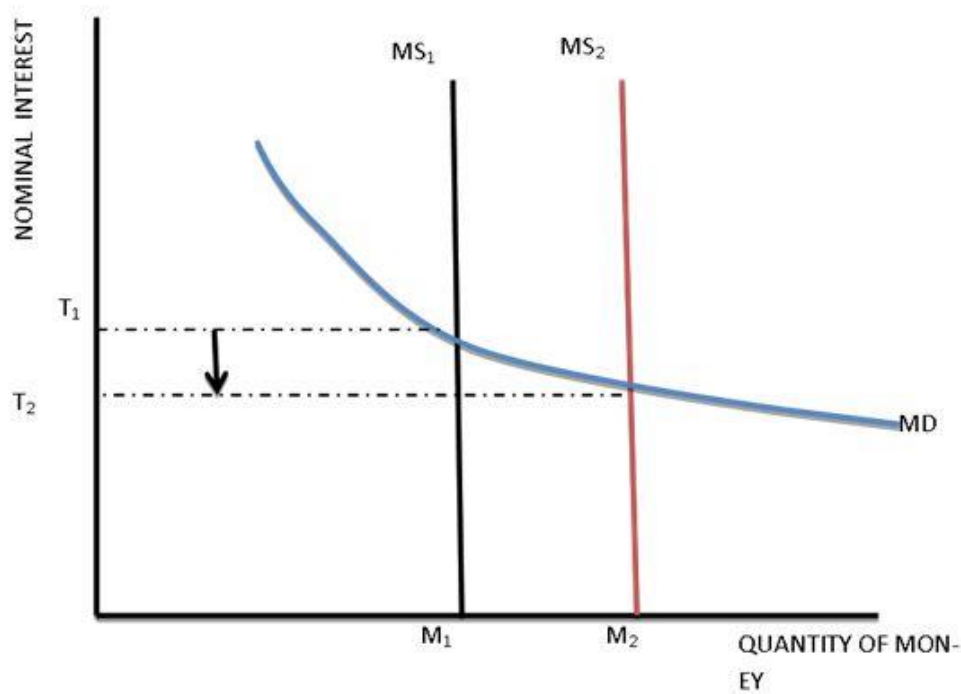


Figure 7: Money market curve

What Shifts Aggregate Demand and Supply Cont.

(d) If the Government officers pursue [fiscal policy](#), in part (b) above, rather than [monetary policy](#), assuming that the recessionary gap stands at \$300 billion and the marginal propensity to consume (mpc) is 0.8, then:

- i) Calculate the least required change in government spending to eliminate the recessionary gap without changing taxes.

The minimum required adjustment in government spending is calculated by dividing the recessionary gap by the government [spending multiplier](#).

In this case, \$300 billion/5 = \$ 60 billion, earning you one mark.

- (ii) Explain the effect of changing taxes without altering government spending to eradicate the recessionary gap. Will the least required adjustment in taxes be larger than, slighter than, or equal to the minimum necessary adjustment in government spending in part (d)?

The minimum change in taxes will be greater than the minimum change required in government spending. Here's the explanation: the tax multiplier is much lower than the government spending multiplier i.e. ($mpc/mps = 0.8/0.2 = 4$) < ($1/mps = 1/0.2 = 5$). This is because a portion of the increased available income caused by the reduced taxes will be put into savings and not spent. This will earn you two marks.

(e) Explain the effect on the aggregate demand and aggregate supply assuming the government eases income tax rates to remove the recessionary gap.

- (i) Aggregate demand will increase due to an increase in disposable income, which in turn causes an increase in consumption and investment.
(One mark)
- (ii) aggregate supply can respond in three different ways, each depending on the approach you take.

What Shifts Aggregate Demand and Supply Cont.

First, the long run aggregate supply can remain the same because lowering taxes increases consumption and investment or there is no change in inputs.

Second, long run aggregate supply can increase because low taxes increase savings and investment in physical capital or improve productivity due to the enhanced incentive.

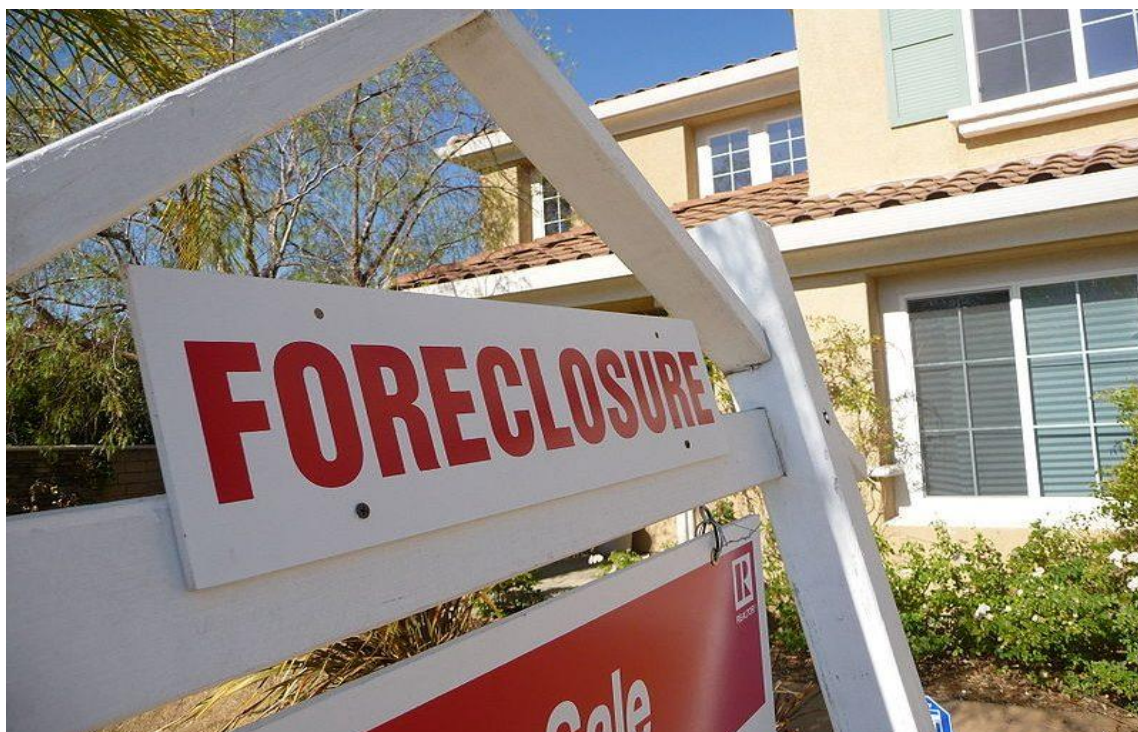
Third, the long run aggregate supply can diminish because reduced taxes can lead to crowding out of more investment.

Each correct response gains you one mark and another mark for a correct explanation.

Did you notice that the final answers are supported by well-articulated points that we had mentioned earlier, especially in part (a) and (e)? We defined aggregate demand and explained what shifts aggregate demand and aggregate supply. It is always crucial that you remember to draw large, clear, and well-labeled graphs.

To wrap up on the subject of aggregate demand and supply, keep in mind that these concepts are important in formulating economic policy, and you are highly likely to be examined on it. A good understanding of what shifts aggregate demand and aggregate supply, as well as the curves, different economic theories around them, and how they are practically applied will boost your confidence as you approach the exam.

The Business Cycle



[Image Source: Wikimedia Commons](#)

The recession of 2008 was a ground shaking event that shook the foundations of nearly every country's economy throughout the world. The reasons behind the economic downturn that resulted in the worst crisis since the Great Depression are complicated and numerous. However, the basic reasoning behind the downturn is simple.

The 2008 recession was not all that strange from an economic perspective. It is completely normal when you view it from the perspective of the phenomenon known as the business cycle. The business cycle is a volatile function of the world and domestic economy that is demonstrated by periods of growth and recession.

You may notice on the news that the GDP has grown or [unemployment](#) has gone down. These trends signify that we are in a period of growth in the United States. The current growth is all following the 2008 recession.

The Business Cycle Cont.

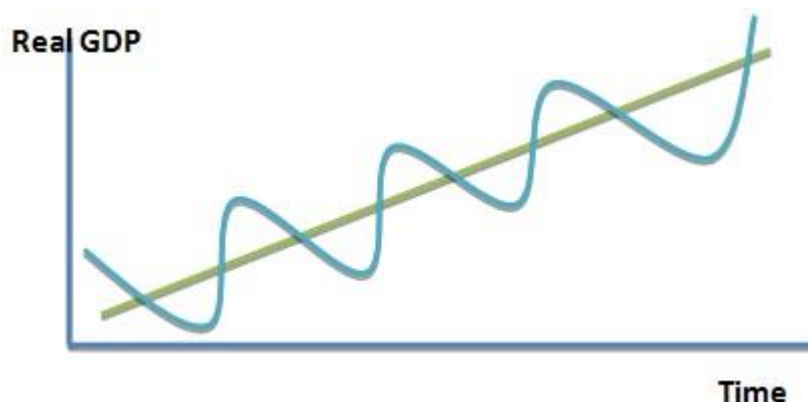
The Business Cycle Basics

The business cycle is represented by periods of growth and recession in the economy. It can be demonstrated in terms of long-term and short term growth. These periods of growth and recession are demonstrated using the country's real gross domestic product (GDP) as its base.

Real GDP is the measurement of overall output of the economy in real terms, meaning it has been adjusted for [inflation](#). When the country's economy is in a problem spot, then the GDP shrinks. When the country is at the level of full employment, then the GDP grows.

The relationship between the business cycle and GDP growth is an element of modern capitalism. For an economy to be healthy, there will always be periods of growth and periods of recession. The severity of the growth and recession is a subject of real debate, especially in current politics.

Below is a basic representation of the business cycle:



The above graph shows the business cycle in a nutshell. The blue curvy line represents the times of growth and recession in the economy. The green line represents the overall trend of GDP growth.

The Business Cycle Cont.

The downward slopes of the blue line are called recessions and the lowest point is called a trough. The upward trend is known as a recovery until it reaches the peak of the slope and turns back down again.

The graph demonstrates that GDP growth always follows an upward trend. That means that despite downturns, the recovery is always more than the recession. A nation's economic performance is therefore measured less by its overall GDP and more by how much the GDP has grown in a given year.

Despite the fact that the graph appears to show a smooth curve of recessions and recoveries, the economy is much more complicated. Within a given month the GDP will fluctuate between miniature troughs and peaks in a smaller business cycle. Because of the volatility of GDP growth, economic performance is measured in quarters or four periods of three months throughout the year.

You may notice how the blue line seems to have a greater gap towards the end than previous stages in the cycle. That gap demonstrates an extended period of recession, and in order to meet the rule that GDP is always growing, the corresponding recovery period should be far greater than the recession. At that point you can tell how the severity of the recession and the related growth can cause both trends to become steeper and more unpredictable.

In recent years, recoveries have far outperformed recessions in most developed countries, with the best example of this being the United States. Unfortunately, this is not necessarily a good situation. An extended recovery means there is a severe recession waiting around the corner.

The Business Cycle and its Indicators

The trend of the business cycle and [unemployment](#) are closely related. During times of economic recession unemployment will increase and the opposite will happen during times of recovery. However, the recession usually is not a cause of unemployment.

The Business Cycle Cont.

Unemployment is rather a sign that a recession is occurring. The recession itself will usually come from business malpractice or a jarring change in the economy. These are called shocks.

Shocks by definition are unexpected events that have happen in an economy and are usually the precedent to a recession. These can range from severe weather events to war or shock therapy enacted by severe governmental austerity. A special kind of shock is called a bubble, which is a sharp upward growth in the economy caused by illogical speculation and unregulated business practices.

A great example of a shock is the housing bubble in 2008. In a simplified version of this bubble, let's say your friend buys a house. A year later he sells that house for double what it is worth.

You catch on to your friend's gains and you buy a house as well. Then another friend of yours buys a house, picking up on the trend. Eventually thousands of people are buying houses and the housing market is booming, causing companies to build more houses to meet demand.

However, in order to pay for your house and each other house you decide to take out loans. All of your friends and their friends took out loans as well. The problem is that, you cannot realistically pay back these loans if the housing prices keep going up and you keep buying and selling.

By the time the bank comes around, you and your friends are unable to pay back, meaning everyone is defaulting on their loans. Suddenly, the housing market also fails because the defaults on the loans mean no one is buying houses anymore. What was once a huge part of the economy suddenly turns to nothing instantly.

The banks, in the meantime, lose their investments after everyone defaulted on their loans. The sudden burst of that housing bubble grinds the economy to a halt due to the speculation in the housing market that was otherwise illogical. This then leads to a shock in the economy.

The Business Cycle Cont.

For the most part, [unemployment](#) will start to increase as the economy shrinks and businesses either fail or adjust their employment based on falling demand. It is not necessarily a bad situation because unemployment will readjust the economy to another focus.

The unemployment level is an indicator of the parts of the business cycle because of how closely related they are. When the economy is at full employment, then the business cycle will be at its peak. When the economy is in a recession, then employment will fall below full employment in what is called a recessionary gap.

The Business Cycle and Government Policy

Government policy plays a huge role in the severity of the trends in the business cycle. The government looks for signs of recession or recovery and adjusts its economic policy accordingly. In the United States, this is the judgment pattern for both the [fiscal policy](#) of the national government and the [monetary policy](#) of the Federal Reserve.

During recession period, the government will enact expansionary policy. These policies try to move the economy back to full employment and close the recessionary gap. There is much debate about whether expansionary policy works, but it is enacted as described below:

Expansionary Policy:

[Fiscal Policy](#)

- Lower [taxes](#) to increase consumption.
- Increase government spending to boost consumption and raise employment with public works.

[Monetary Policy](#)

- Fed buys government bonds, increasing [money supply](#).
- Fed lowers reserve ratio, allowing banks to lend more money.
- Fed lowers the discount rate, making borrowing money more desirable.

The Business Cycle Cont.

Likewise, during times of recovery, the government will want to prolong recovery as long as possible. As long as recovery lasts, the employment rate will remain stable. Once things start to turn, then it is harder to keep people employed.

The primary way the government will prolong the recovery period is by encouraging steady growth. The problem is that the economy will always fall and rise, so the government uses its policies to help create an artificial mini recession with the hopes that the recession never goes out of control so as to reduce [inflation](#). Government regulates the economy through contractionary policy, which functions as follows:

Contractionary Policy:

[Fiscal Policy](#)

- Raise [taxes](#), therefore reducing consumption.
- Reduce government spending.

[Monetary Policy](#)

- The Fed sells government bonds.
- The Fed raises the reserve ratio, increasing the amount banks will have to save.
- The Fed raises the discount rate, charging more money for borrowing from the Fed.

Contractionary policy is usually extremely unpopular, so the government only uses it during times of emergency, such as when inflation is too high.

In both cases, the government has to take special care that its policy does not go on for too long. Too much expansionary policy can cause hyperinflation, which will eventually lead to an even bigger recession than they were working to resolve. At the same time too much contractionary policy can create a bigger recession than was planned, and take the economy into a downturn.

The Business Cycle Cont.

Calculating the effects of a specific policy is not an exact science and can even end a politician's career if it is not handled correctly, as is the case with George H. W. Bush when he had to raise [taxes](#) after saying he would not. In the context of an AP Macroeconomics review, you will have to figure out what policy the government might use during a scenario where the economy is under the conditions as described above.

Conclusion: Problems with the Business Cycle

The business cycle is the system through which the economy functions. It constantly rises and falls, but it always has an upward trend. That means that the economy is always growing in the long run, despite short run difficulties. Too much growth is not always a good thing, however, and an extended period of growth could mean there is a bubble waiting to burst around the corner. This happened during two very specific events in recent history. A bubble first burst in 2001 with the dot com bubble and then again in 2007-2008 with the Mortgage bubble.

The reasons behind these bubbles are complex and numerous, but the basic idea behind the two is that they followed a period of extended growth that was unprecedented. Whenever there is unprecedented growth, then the recession afterwards will be even greater. That means that the periods between growth and recession have become extended; there are even greater dips and even greater peaks where the wave line has become exaggerated.

The government today is enacting type of expansionary policy to attempt to curb too much growth so that if a recession comes, it will come at a much lesser degree. Currently, the government is threatening to raise the discount rate without actually doing so, which has caused businesses to become wary of borrowing money. This has expanded into a new type of [monetary policy](#).

The AP Macro test will educate you more on how the business cycle works and how the government interacts with it. You will also have to use your reasoning to figure out how the government can control the economy without having it spiral into a recession.



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How to Calculate Gross Domestic Product for AP Macroeconomics



[Image Source: Flickr](#)

Below is a cheat sheet to help you calculate nominal GDP and real GDP. Before we get started with our calculations, let's first review what GDP is.

How to Calculate Gross Domestic Product for AP Macroeconomics Cont.

What is GDP?

GDP, or Gross Domestic Product, is that term economists use to determine how well or poorly an economy is doing. That's easy enough. ***It is the total combined monetary value of a society's goods and services produced within a given period of time.*** So if you take all of the companies and individuals who produce goods and services, add all of their monetary value up, you get your GDP. Because there are literally millions of companies and individuals in the U.S., Gross Domestic Product is usually in the trillions of dollars. Movies like Deadpool and Pitch Perfect add to the GDP because they generate so many ticket sales; companies like SnapChat add to the GDP; food chains like Starbucks and Chipotle add to it; individuals like Taylor Swift and your parents; and lots of others in every industry and sector you can think of contribute to our GDP. But the bottom line is the more these companies and individuals produce in a given period of time, the more jobs there will be and the higher wages there will be. In everyday terms, that means more money in people's pockets, more trips to the mall to buy the stuff you like, and more trips to the theater to enjoy a show.

How to Calculate GDP vs. Real GDP

So what is the method to calculate GDP? It's really quite simple. GDP can be determined by the formula below. This formula works every time, which is why they call it a formula. But please note, when most people talk about GDP, they are talking about "**nominal GDP**," or GDP measured in a specific period of time (this differs from real GDP, which we will get to later). For large, "developed economies" (i.e., the U.S., Canada, and Europe), GDP numbers will usually be in the trillions. For smaller, "developing economies" (i.e., economies in Africa, Latin America, or some parts of Asia), GDP numbers will often be in the billions. To put this in context, if you ever saw the Wolf of Wall Street movie, A list actor Leonardo DiCaprio made \$25 million from the movie whereas B list star Jonah Hill only made \$60k from it. The same is true for developed vs. developing economies; some nations' GDPs are a lot bigger than others.

How to Calculate Gross Domestic Product for AP Macroeconomics Cont.

The way economists determine the monetary value of what companies and individuals produce is by looking at the total quantity of goods or services produced by that person or individual and then they multiply it by the price of those goods or services.

Total Revenue=Price (P) X Quantity (Q)

So let's say we were trying to calculate the total monetary value, or total revenue, of the video game developer Rocksteady Studios last year, which produces the "Batman: Arkham Knight" video game. To calculate the total monetary value of Rocksteady Studios—or total revenue—we would need to know the total number of games they produced in 2015 (in this case, 5,000,000) and the price of those games (\$29.99).

Total Revenue= \$29.99 (P) x 5,000,000 (Q)

Which equals a grand total of \$149,950,000 (plus tax, of course).

When you take total revenue of not only Rocksteady Studios, but you also take all of the other people and firms' total revenue (in this case, in the UK, which is where Rocksteady is based), you will begin to get an idea for how much collective monetary value private companies and individuals are producing. It's important to note, though, that this does not get you your total GDP figures. It's just an illustration for how total revenue is calculated, which is only one part of the GDP game.

To calculate actual GDP, there are a couple of approaches. We'll look at them below. We'll also look at how to calculate "Real GDP."

One way to determine GDP is the "EXPENDITURE APPROACH," which measures what households spend:

$GDP = C + I + G + (X-M).$

How to Calculate Gross Domestic Product for AP Macroeconomics Cont.

And here's what the formula actually stands for:

GDP = private consumption (C) + gross investment (I) + government spending (G) + (exports – imports).

A way to more easily remember this is...

GDP= All the stuff everyone buys + investments made in companies like Uber + Obama's big spending + (the stuff we buy overseas – the stuff people from overseas buy from us).

We'll get to an example of this in a second, but before we do let's talk about the second way GDP is typically calculated.

The second way GDP is calculated is the INCOME APPROACH, which measures what households earned:

$GDP = W + I + R + P + IBT + CCA.$

In other words, it is...

GDP = wages + interest income + rent + profits + indirect business taxes + capital consumption allowance.

An easier way to remember this is to think about it this way:

GDP = how much money everyone earns from their jobs + money we earn from banks + our rent + our profits from our businesses + taxes to the government + depreciation.

How to Calculate Gross Domestic Product for AP Macroeconomics Cont.

Sample GDP Calculations

I know this seems like a lot to remember for the test especially given everything else they are testing you on, but you got this. Here are a few examples we can work through to help you become a pro at calculating GDP.

Sample Example 1:

Daytime TV star Ellen has decided to buy a tiny country and re-name it “Dance Land,” after her favorite pastime (dancing). She has also declared herself Emperor in the Highest. All because she can. Emperor Ellen has just hired you as the High Priest of the Economy for “Dance Land.” Dance Land is mainly catering to tourism, where most people work as comedians, dancers, or at resorts. Their private production generates \$50,655,303 annually. She has also convinced Seth Rogen and Steve Carell to invest \$10,000,000 in creating a sequel to Dance Land’s chief export, Dance Dance Revolution, which generates \$1.2B in foreign sales. Dance Land’s imports are \$35,000,000 annually. Emperor Ellen doesn’t like imports—she is quite jealous—and wants more homemade items. She has decided to spend \$25,000,000 to build new schools, roads, and manufacturing plants for the country to increase Dance Land’s ability to be more productive. As High Priest of the Economy, Emperor Ellen needs you to calculate her country’s GDP. How do you go about doing it?

Well, all we have to do is use the GDP formula—which, again, is why they call it a formula—and we can arrive at our answer.

Here’s what we know:

Private consumption = \$50,655,303
Gross Investment = \$10,000,000
Government Spending = \$25,000,000
Imports = \$35,000,000
Exports = \$1, 200,000

How to Calculate Gross Domestic Product for AP Macroeconomics Cont.

So when we plug our GDP formula in, we get...

$$\mathbf{GDP=C + I + G + (X-M)}.$$

$$\text{GDP} = \$50,655,303 + \$10,000,000 + \$25,000,000 + (\$1,200,000 - \$35,000,000)$$

$$= \$1, 202, 155.33$$

Sample Example 2:

You have just been hired by the Bureau of Economic Analysis in the U.S. Department of Commerce. Your chief job is to be responsible for determining the GDP in the United States. The President, U.S. Congress, TV shows, and even your high school AP economics teacher will be reading your calculation and report, so the pressure is on. If you get it wrong you will probably be disowned by your family and friends and cause a major financial collapse, bringing suffering to millions, especially pets and small children. So be very careful in your calculations. Your boss has asked you to determine GDP, but instead of using the spending approach, they want you to use the income approach. How do you go about doing it?

The first thing you will need to remember is what is the formula for calculating GDP (using an income perspective):

$$\mathbf{GDP= W+ I+ R + P + IBT + CCA.}$$

The next thing you will need is the data. On the AP test, all of the data will be provided for you. Just plug and play your formula and you will be all set—it's simple addition.

BUT there is a catch. And the catch is that measuring GDP with only these two approaches can sometimes be misleading if you are trying to compare current GDP with past GDP or trying to compare one country's GDP with another country's GDP.

How to Calculate Gross Domestic Product for AP Macroeconomics Cont.

When this happens, you will have to calculate what is called “Real GDP.” Based on its name alone, Real GDP is just trying to keep it real, or to more accurately measure an economy given that inflation and deflation impact prices from year to year. Real GDP reports as if prices never went up (inflation) or down (deflation).

Here’s How We Calculate Real GDP

Luckily, there is a simple formula for this, too. ***To calculate real GDP, it’s nominal GDP (GDP not adjusted for inflation for whatever year you are using as a base year, or comparison year) divided by the deflator (the measurement of inflation), or $R=N/D$.*** So, for example, if prices rose 2.5% since the base year, the deflator is 1.025. What this means is that if you nominal GDP was (\$100,000,000), the real GDP would be \$97,500,000 (or $10,000,000/1.025=\$97,500,00$).

How You will be Tested on GDP on the AP Macroeconomics Test

You will have a Multiple Choice Section (Section 1) and a Free Response Question (Section 2). The first part of the test will last for 70 minutes and will account for 66% of your score. The second part of the test will be 60 minutes and will account for the remainder of your score. For the multiple choice section, you could be asked questions like this:

In a certain year, nominal gross domestic product grew by 6 percent. The inflation rate was 3 percent. Real gross domestic product for this year was

- A. Grew by 6 percent
- B. Remained constant
- C. Grew by 12 percent
- D. Grew by 3 percent

And the answer is D. Nominal GDP is the rate at which real GDP increases. To find real GDP growth (growth that accounts for inflation), subtract the inflation rate from the nominal GDP growth rate.

How to Calculate Gross Domestic Product for AP Macroeconomics Cont.

For the Free Response part of the exam, you will always have 3 questions. Question 1 will always be the long FRQ and I would recommend spending 25 minutes on it. It is best to draw your graphs to help you better and more quickly figure out the answers (for this question and each question thereafter). Always remember, too: do not be intimidated by the content (i.e., the specific information they ask you to solve), just use the formulas you have studied in class and in your test prep to plug and play. And if all else fails, use your logic. You are like a detective when solving the FRQ section. But be sure to be CLEAR with your responses and write them CLEARLY (you can get docked for not making your answer known and for unintelligible handwriting). Just go into the test knowing that you have prepared as much as you can and use your intelligence and logic to think through the multiple choice and FRQ and you will be just fine.

Wrapping up Calculating GDP for AP Macroeconomics

So as you can see, Gross Domestic Product is arguably the most important concept in all of macroeconomics. There are several ways to calculate it (the expenditure approach and the income approach) and several ways to measure it (e.g. Nominal GDP vs. Real GDP).

Inflation



[Image Source: Flickr](#)

Inflation is a primary concern for economists, voters, and policy makers alike. It is the major factor that affects [unemployment](#) and consumer's ability to buy or sell their products. Its rate also affects the government's ability to buy or sell bonds and run effective [monetary policy](#).

The key definition of inflation is the general increase in the prices of goods and services in a given economy. The prices that are calculated into the inflation rate are usually those that are related to key elements of the economy in a grouping known as the **market basket**. This basket of goods is usually common consumer goods such as milk and bread, as well as services such as the internet.

When inflation is taken into consideration while calculating the value of a nation's GDP, this GDP is referred to as the nation's **real GDP** or its value after inflation devalues its currency. Despite its effects on the economy and the nation's GDP, there is no consensus on the positives and negatives of an inflation rate.

Inflation Cont.

Types of Inflation

There are two main types of inflation that are dictated by different factors in the economy. These two main types are either caused by the government's [fiscal policy](#) or consumer behavior. They both may be controlled by direct government intervention. These types are as follows.

1. Cost-Push

This is a complicated type that is not typically demonstrable in the economy at large. The most common situation that is cited as an example of cost-push inflation is the 1970's oil crisis. The increased cost of petroleum during the crisis increased the prices of goods related to petroleum, which pushed up the prices of these products.

As demonstrated in the example, cost-push is attributed to the increase of the costs of goods and services that do not have substitutes. Oil is the good in this example, and it is required for the production of goods such as plastics and rubber. There are no cost effective replacements for producing these goods. The rising price of oil therefore affects the prices of goods related to oil.

2. Demand-Pull

This is the most common type and the key factor in dictating [monetary policy](#). In this case, there is price inflation when GDP is rising at the same time that [unemployment](#) is falling. As demonstrated by the [Phillips Curve](#), when unemployment falls inflation will rise because they have a negative relationship.

Another way this may be explained is that there is too much money in the economy and not enough production. As a result, demand continues to increase and prices will rise to meet demand.

Inflation Cont.

Cost-push inflation will not normally appear in the AP macroeconomics exam except maybe as a multiple choice question. However, demand-pull will almost always appear in the free response questions, especially as a result of government intervention and monetary policy. Because of this we will focus more on how demand-pull inflation works.

Fiscal and Monetary Policy

The primary goal of expansionary and contractionary monetary and [fiscal policies](#) is to raise or lower the [unemployment](#) and inflation rates. Doing so will increase or decrease production. While there are many aspects of these policies, the most common way to do so is by increasing or decreasing the [money supply](#) and affecting demand.

When the government is enacting expansionary policies, it is actively pumping money into the economy. This is done in three ways. The first way is by increasing spending. As the government increases spending it is putting more money and investment into the economy. This investment money is directed towards consumers who eventually spend it on other goods. This turns into further consumption and further demand. The rising demand will increase inflation.

Secondly, the government can enact public works. When it creates public works it will hire more workers to take on projects. As a result, the unemployment rate will fall and inflation will rise.

Finally, the government's central banks (i.e. the Federal Reserve) can buy bonds in order to increase the [money supply](#). When the central bank sells bonds to banks it acts as an IOU with interest where eventually the bank can sell the bond back to the central bank for money with a profit in interest. The central bank can start buying bonds back to increase the money supply as a result, which increases inflation. The bank can also directly mint more money to increase inflation, but this can be uncontrollable.

Inflation Cont.

Improper governmental handling of the economy can lead to what is known as **hyperinflation**. When the government enacts an expansionary policy to decrease [unemployment](#), inflation will rise. The government expects that the changes in both rates will be within a certain limit. However, if the government makes a misstep in its policies, the inflation rate can rise too much and cause hyperinflation, where the price levels rise exponentially.

Finally, in macroeconomics, the inflation rate in one country can influence its ability to buy and sell goods on the global market. When the inflation rate increases in the United States, for example, its goods are more expensive which makes them less desirable. As a result, exports decrease. Conversely, a falling inflation rate decreases the price of goods relative to foreign goods and exports increase.

Inflation and AP Macro

The inflation rate has a key role in AP econ and therefore should be a major part of your AP macroeconomics review. It is especially important within the realm of the free response questions, as demonstrated by the [2014 AP Free Response Questions](#). Let's demonstrate how inflation may have a role in your AP.

The foremost example of inflation's role on the AP exam is by way of demonstrating how it affects the economic relations between two countries. In the 2014 FRQ, you must demonstrate how a change in the inflation rate will affect the economy of the two countries in various ways.

In order to answer this question, you will have to have a grasp of the AS-AD curve as well as the [Phillips curve](#). As a general rule, as inflation increases, demand decreases. This means that as inflation increases in the United States, demand for its goods decreases. Therefore, South Korea will be less likely to buy its goods. This will generate a deficit in the United States' current account balance due to it exporting less than it imports.

Inflation Cont.

The price of one currency versus another will be key in measuring relative inflation. In order to visualize this, you will most likely have to draw a graph that shows the relationship between the two currencies and the overall shift in their value.

As part of the effects of inflation rates on the economy, you will also most likely have to demonstrate the effects of the Federal Reserve's [monetary policy](#) on the inflation rate. The Federal Reserve mostly effects inflation by way of increasing or decreasing interest rates or the [money supply](#). You will have to explain why these actions increase or decrease the inflation rate, or explain the inflationary effects as part of the answer.

Inflation Relative to Other AP Macro Concepts

The most important thing to consider is how inflation relates to all other aspects of the economy. The economy is a complex machine that contains many different factors and influences. The inflation rate is just one part of this machine. A change in one part can cause a change that ripples throughout the economy, which is why [fiscal](#) and [monetary policies](#) are so difficult to manage.

This is most obvious in the first question of the aforementioned free response questions. Within this FRQ, you have to demonstrate how the government will influence the economy during cyclical and natural [unemployment](#). If you remember, as previously mentioned, the inflation rate is conversely related to the unemployment rate. As part of the answer you have to mention how the change in unemployment affects the inflation rate.

Other considerations to keep in mind are the effects of inflation on the real gross domestic product. It is important to keep in mind that the real GDP is when inflation has been taken into account for economic production. Therefore, all actions under this measure of production are subject to inflationary changes. The real GDP will fall as inflation rises and vice versa.

Inflation Cont.

Conclusion

The inflation rate is an extremely important factor to take into consideration while calculating economic performance. The main way of calculating inflation is through the Consumer Price Index (CPI). The CPI takes a common basket of goods that should be universal among consumers. It calculates the difference in prices between two years to get the inflation in that country.

Inflation is influenced mainly by government policy and consumer demand. When the government wants to increase or decrease [unemployment](#), it will respectively decrease or increase inflation. At the same time, an increase in demand by consumers due to them having more money will cause inflation to grow.

Measuring inflation influences all other aspects of the economy, both domestically and globally. For this reason it is a key part of Macroeconomics. You should take inflation into account when you are planning your AP macroeconomics review. It is more than likely to appear on the exam, especially in the FRQ section.

Unemployment



[Image Source: Wikimedia Commons](#)

When we think of unemployment, we usually think of people without jobs. It is usually only a hot topic when the economy is experiencing a downturn or there are companies that are closing down. However, unemployment is a much more complex and natural thing that affects everyone's every day life.

Within the field of macroeconomics, unemployment has a different definition. This definition is what will be applied as part of our AP macroeconomics unemployment review definition. It is important to keep this in mind and separate it from what you have considered unemployment up until now.

This review will help you understand the types of unemployment and its causes. It will help you understand the role of unemployment in macroeconomics and why it is a good and natural occurrence. Finally, we will help you look at unemployment from an AP Macro perspective and how it might appear on the exam.

Unemployment Cont.

What is Unemployment?

In truth, there is no hard and fast definition of what unemployment is. However, it has actual costs and effects on the economy as a whole. It affects the standard of living of a country. Unemployment also means that the country is not reaching its full production potential. Despite this, there are several different types of unemployment, some of which are actually good.

The three types of employment have a rating from best to worst in the eyes of economics. During your AP Macroeconomics review, you will have to study the different types and their effects. These types of unemployment are:

1. Frictional: This is the best case scenario in terms of unemployment. People who are frictionally unemployed are between jobs. This means they are not in the midst of looking for a new job, but rather they already have one and they are waiting to start working. Frictional unemployment would be the only kind in a perfect economy.

This type of unemployment is considered when economists consider the country's full employment rate, or natural rate of unemployment, which is about 5% in the United States.

2. Structural: This type of unemployment is part of an underdeveloped or mismanaged economy. People are structurally unemployed when they are well-qualified but are not able to find a job to realize their full potential. An extreme case of this would be an engineer who cannot find a job and ends up working as a fast food restaurant.

A person is also structurally unemployed when their job becomes obsolete. For example, a type writer repairman was probably relevant and popular in the past, but is now a niche job. Many repairmen became unemployed as a result.

A structurally unemployed person would be considered underemployed, which means they are working in a position beneath their skill level, or they are unemployed due to changing times.

Unemployment Cont.

3. Cyclical: If you remember from past AP macro lessons, [the business cycle](#) is the rhythm of the economy. It is filled with ups and downs and the government attempts to use [fiscal policy](#) and monetary policy to moderate the severity of the business cycle.

Cyclical unemployment is the result of the [business cycle](#). During the economy's downward slopes people get laid off. This can either be due to lower demand or the failure of the business due to mismanagement. Because of the extreme nature of this type of unemployment, it is generally considered the most severe type.

No matter which type of unemployment is happening at the time, it has a general effect on the economy. This effect on the economy is measured by way of **Okun's Law**. The law states that for every 1% increase in the country's unemployment rate there will be a 2% fall in its potential GDP. The potential GDP is how much the country could be producing if it were at full employment.

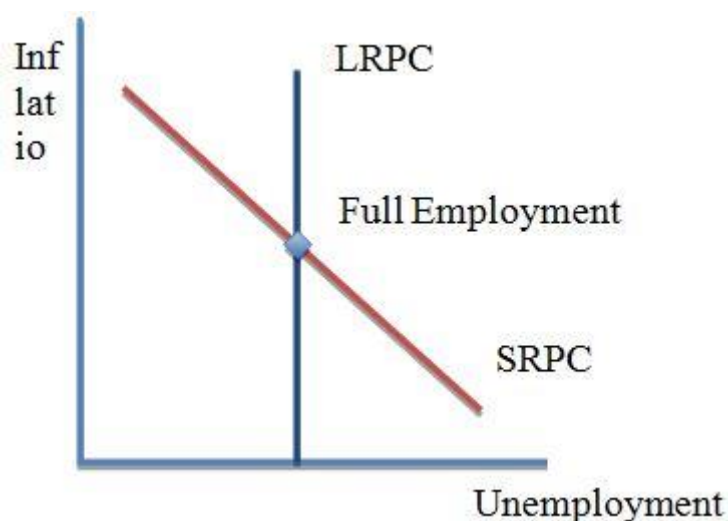
Okun's Law is demonstrated by the following equation: $\% \text{ change in GDP} = 3\% - 2x$

The 3% in the equation is the assumed GDP growth rate when the country is at full employment (5% unemployment in the United States) and x is the change in the unemployment rate.

The relationship between the economy's performance and unemployment is further demonstrated by the Phillip's curve, which is very likely to appear on an unemployment related FRQ on the AP macro exam.

Unemployment Cont.

The Phillip's curve is as follows:



The Phillip's Curve demonstrates the relationship between unemployment and [inflation](#). The long run Phillip's curve (LRPC) is vertical as unemployment should even out in the long run. The short run Phillip's curve (SRPC) is downward sloping, representing a negative relationship between the inflation rate and the unemployment rate. The point at which the LRPC and the SRPC intersect is the full employment rate.

When the point moves down the slope, unemployment increases and inflation falls. When the point moves up the slope, the opposite happens and inflation increases. The AP will ask you to demonstrate a **recessionary gap** or an **inflationary gap**. An inflationary gap occurs as the point moves up the SRPC while the recessionary gap occurs as the point moves down the SRPC.

Now that we know the types of unemployment and how it affects the GDP, how do we know when someone is actually considered unemployed? Is it everyone who does not have a job at the time?

Not exactly!

Unemployment Cont.

Unemployment is basically when someone does not have a job and is currently looking for a new one. The key to this is that the person will have to be actively looking for a job in order to be considered unemployed. That means people who are not looking for a job are not considered in the unemployment rate.

Those who are not considered unemployed are as follows: active duty members; most of the homeless; stay at home parents; full-time students; and anyone younger than the legal working age (16 years old). It should be noted that while someone in one of these groups might want a job, if they are not looking, they are not unemployed.

How is Unemployment Represented in an FRQ?

There are several ways that the AP econ exam might ask you about unemployment, especially in a free response question. There has never been a direct question about unemployment itself, but rather how it might affect the economy or be affected by the current economic situation.

The most common scenario is shown in [this FRQ by the CollegeBoard](#). The first question presents that the United States economy is operating at full employment. These types of questions will always tell you the status of the unemployment rate, whether it is at, above, or below full unemployment. You must consider the effects on the economy that this might have, especially considering its relation to aggregate supply in the short- and long-run as well as aggregate demand.

You will have to relate the unemployment rate to all aspects of the economy and eventually draw conclusions to other parts of macroeconomics, including interest rates and personal savings considerations and how they affect the economy as a result.

The second scenario is presented as the Phillip's curve. You will have to calculate the effect the unemployment or inflation rates have on the economy based on the Phillip's curve. You will more than likely have to draw a Phillip's curve and correctly label it to get your point across.

Unemployment Cont.

In the above example from the 2013 AP Macroeconomics exam, the Phillip's curve is mainly dealing with the effects on interest rates. However, if you read further, all the questions also have to deal with unemployment. This means that you will have to associate what the unemployment rate has to do with interest rates and [inflation](#).

Finally, there is a small part of the employment rate that has to do with the [production possibilities curve](#). If you remember, this curve presents the frontier for producing all possible goods for any country. A point on the frontier represents the maximum amount of goods the country can produce at that point, giving a trade-off of one product for another at full employment.

You will also use the [production possibilities curve](#) to demonstrate a recession and [inflation](#) to show how the unemployment rate affects production. As a general rule of thumb, when the unemployment rate rises, production of goods decreases from what is considered the potential perfect position for that country.

In the end, you also have to take unemployment into consideration for [fiscal policy](#). When the government enacts fiscal policy, you will have to consider how that policy will affect the unemployment rate. In this case, when the government wants expansionary policy, the unemployment rate should fall. During contractionary policy, the unemployment rate will go up. The two policies can be represented by the [Phillips curve](#) which shows the direct relationship between [inflation](#) and unemployment.

Conclusion

Unemployment is an integral part of the AP Macroeconomics exam. You will have to use your knowledge of unemployment and relate it to other aspects of the economy. When you understand how unemployment works and how it affects the economy, then you are one step closer to getting a 5 on the AP exam.

How to Graph Short-Run Phillips Curves

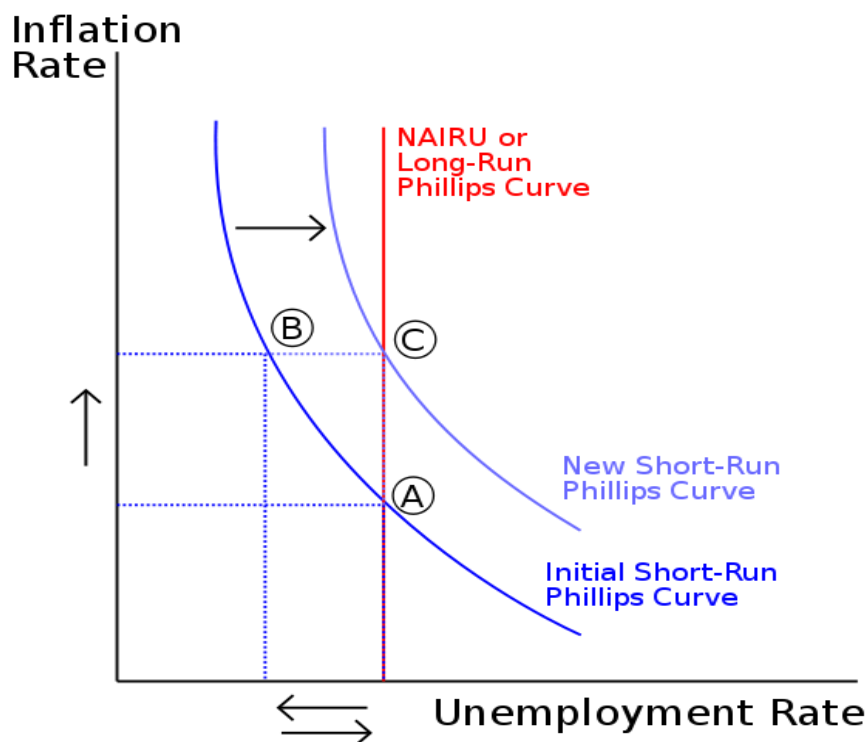


Image Source: Wikimedia Commons

Welcome to the AP Macroeconomics crash course on graphing the Short Run Phillips Curve (SRPC)!

What is the Phillips Curve?

The Phillips Curve is really a simple concept. ***It measures the relationship between inflation and unemployment***, or the trade off between inflation and unemployment. The more inflation (aka the higher the prices of goods and services) the lower the unemployment; the lower the inflation (aka the lower the prices of goods and services) the higher the unemployment. Do you see that?

How to Graph Short-Run Phillips Curves Cont.

It's a trade-off. In other words, if everybody is employed and making money, the higher prices for goods and services there will be because people will have more money to spend. As a consequence, businesses will raise their prices to make more money because they see people can afford to pay for it (wouldn't you raise your prices if you thought people were making more money?). But if more people are unemployed, the lower prices will be for goods and services (after all, if nobody has jobs, who is going to buy your products at full price? You'll have to lower their prices). As a result of this, there is an inverse relationship between inflation and unemployment, meaning the higher the inflation the lower the unemployment and the lower the inflation the higher the unemployment in any given economy.

Why is the Phillips Curve Important?

The Phillips curve is one of the most consequential measurements in all of macroeconomics, arguably second only to GDP. So if GDP is the Most Valuable Player, the Phillips Curve is the Teammate of the Year. ***If GDP is Batman, the Phillips Curve is Robin.*** But why is this? It's because the Phillips Curve measures two important concepts, inflation and unemployment, which help reveal the health of an economy.

How to Graph a Phillips Curve

So how the heck do we graph a Phillips curve? The AP test will measure your ability to test this, so be sure to remember how to put together this graph. Along the ***Y axis, inflation is measured and along the X axis, unemployment is measured.*** The slope of your graph is always downward (and L shaped) because the higher the prices of goods and services (inflation), the lower unemployment. If you think about it conceptually, it makes sense: prices go up when more people have jobs and prices go down when less people have jobs. Just think about it like this: if Bill Gates gave everyone a job worth \$1 million per year, businesses would raise their prices (aka "inflation") because more people could afford more expensive products.

How to Graph Short-Run Phillips Curves Cont.

On the other hand, if Bill Gates decided to fire everyone, businesses would lower their prices because people couldn't afford the same goods and services any more. The more you understand this point conceptually, the easier it will be to remember the Phillips curve, how to graph it, and how to understand any type of question the AP test makers are giving you.

Here's how this looks on a graph (a Short Run Phillips Curve, or SRPC, and Long Run Phillips Curve, or LRPC):

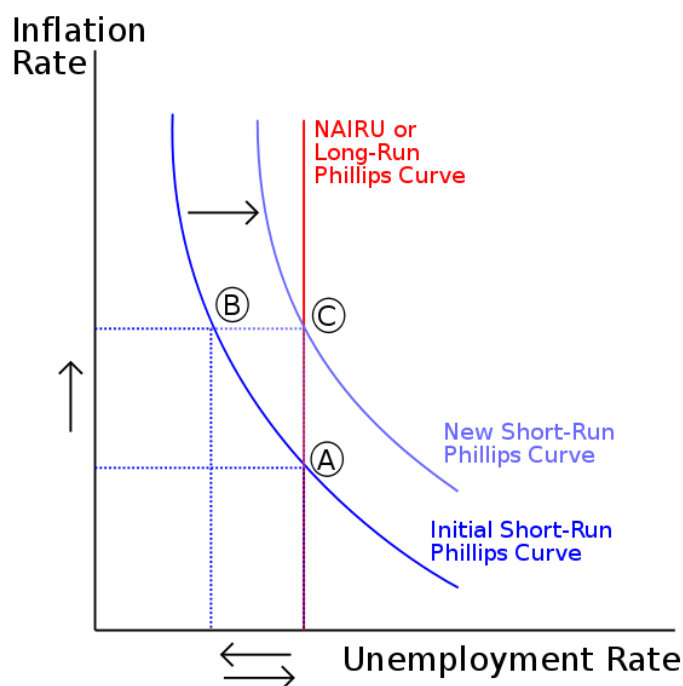


Image Source: [Wikimedia Commons](#)

Please note the Short Run Phillips Curve only measures inflation and unemployment over a short period of time. However, if you want to measure inflation and unemployment over a longer period of time, you will use a Long Run Phillips Curve, or LRPC.

How to Graph Short-Run Phillips Curves Cont.

A Few Examples of the Phillips Curve

It is important to note that there are several factors that shift the Short Run Phillips Curve. **Decreases in Aggregate Supply shift the Short Run Phillips Curve to the right**, for example. Say what? All this means is there will be less goods and services available in the economy in the short run. Common reasons why “aggregate supply” shifts to the right include: an increase in expected inflation; an increase in the price of oil from abroad; a negative supply shock, such as damage from a tornado; and an increase in the minimum wage. But you might be thinking, ok, can you give me an example I can understand and relate to? You know it!

Let’s say fashion companies Nike and Forever 21 have just been given a report that inflation is going to be very high next year, like 10%. With such a dramatic (and expected) increase in inflation, workers at these companies (and companies throughout the economy, including these companies’ suppliers) are going to want to be paid higher wages, which means profits will be smaller once they get their raises. What happens when profits decrease? Workers get laid off because Nike and Forever 21 can’t afford them. This shifts supply to the right (and remember the more rightward shifting on the Phillips Curve, the higher the unemployment will be).

Likewise, if oil increases, if the minimum wage increases, or if there are any NEGATIVE changes to being able to conduct business operations (i.e., a tornado or natural disaster), this will force Nike and Forever 21 (or any companies) to lay off people because they can’t afford them. This shifts aggregate supply to the right. On the other hand, **Increases in Aggregate Supply cause the Phillips Curve to shift to the left** for the exact opposite reasons why Decreases shift it to the right. In this case, an increase in aggregate supply happens if oil decreases, the minimum wage increases, or if there are any POSITIVE changes in things like technology of supply shock. These sorts of things allow Nike and Forever 21 to hire more workers.

How to Graph Short-Run Phillips Curves Cont.

How the Phillips Curve may be Tested on the AP Macroeconomics Exam

You will have a Multiple Choice Section (Section 1) and a Free Response Question (Section 2). The first part of the test will last for 70 minutes and will account for 66% of your score. The second part of the test will be 60 minutes and will account for the remainder of your score. For the multiple choice section, you could be asked questions like this:

1. Which of the following is the best definition of the concept behind the Phillips Curve?

- A. The relationship between worker pay and productivity
- B. The relationship between net exports and GDP
- C. The relationship between inflation and employment
- D. The relationship between supply and demand

And the answer is...C. The Phillips Curve shows the relationship between inflation and employment.

2. As expected inflation increases, the Phillips Curve will

- A. Become Vertical
- B. Become Upward Sloping
- C. Shift to the Left
- D. Shift to the Right

And the answer is...D. We know from our earlier example with Nike and Forever 21, if expected inflation increases, workers want higher wages, which will cause these companies not to be able to afford some of them. As a result, some workers will be laid off, which produces higher unemployment along the rightward side of your Phillips Curve.

How to Graph Short-Run Phillips Curves Cont.

3. Suppose that there is an increase in the price of oil that affects the domestic economy. Which direction will the SR Phillips Curve shift?

- A. A shift of the LRPC to the Right
- B. Shift of the SRPC to the left
- C. Shift of the SRPC to the right
- D. Movement along the SRPC

And the answer is...C. The Short Run Phillips Curve always shifts to the right if there is an increase in the price of oil that affects the domestic economy. This is because higher oil prices make it more expensive to do business (just like higher oil prices make it more expensive to drive a car), which creates higher unemployment and shifts your Phillips Curve.

For the Free Response part of the exam, you will always have 3 questions. Question 1 will always be the long FRQ and we would recommend spending 25 minutes on it. It is best to draw your graphs to help you better and more quickly figure out the answers (for this question and each question thereafter). Always remember, too: do not be intimidated by the content (i.e., the specific information they ask you to solve), just use the formulas you have studied in class and in your test prep to plug and play. And if all else fails, use your logic. You are like a detective when solving the FRQ section. But be sure to be CLEAR with your responses and write them CLEARLY (you can get docked for not making your answer known and for unintelligible handwriting).

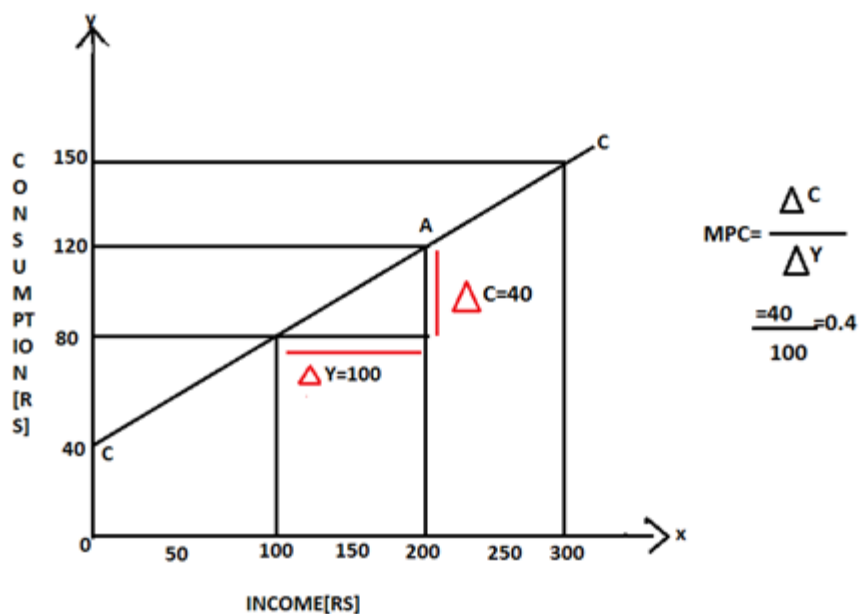
Just go into the test knowing that you have prepared as much as you can and use your intelligence and logic to think through the multiple choice and FRQ and you will be just fine. But remember, the SRPC is one of the most important concepts in macroeconomics, and measures the short-term relationship between inflation and unemployment, and the LRPC measures the long-term relationship between inflation and unemployment.

How to Graph Short-Run Phillips Curves Cont.

Wrapping up the Short Run Phillips Curve

The Short Run Phillips Curve (SRPC) is an easy concept to understand if you remember that inflation and unemployment are inversely related. If inflation goes up, unemployment goes down. If unemployment goes up, inflation goes down. This is almost always true in the short run. Think of the SRPC in specific terms, like if you own a business and everyone has a lot of money, you will charge people more for your product. When you charge more, you will have more profits, can hire more employees (to help grow your business), and so on. Higher prices equals more inflation, which equals lower unemployment.

The Multiplier Effect



As you work through your AP Macroeconomics review, you'll find that the multiplier effect plays a vital role. The multiplier effect shows up in AP Econ in a few ways. In this post, you'll get a broad introduction to the multiplier effect, with a brief overview of the various ways you can expect to see it. Once you have a good understanding of the multiplier effect, be sure to check out our other posts on specific multiplier effects to fill in the details of your AP Macro studies!

The Multiplier Effect Cont.

Introduction

First, we'll need to get a handle on some definitions that will be crucial in fully understanding the multiplier effect. The first definition that you'll want to know is the **marginal propensity to consume (MPC)**. Let's say that you have a new summer job. This means you have a change in your disposable income, or the amount of money you have available after taxes. Then, the marginal propensity to consume is simply what fraction of that change in income you decide to spend. Likewise, the **marginal propensity to save (MPS)** is the fraction of a change in disposable income that you decide to save, or how much money you decide to save from your new job.

These marginal propensities are the foundation for learning the multiplier effect for the AP Macro test and will show up in important equations once you dig deeper into specific multiplier effects.

The Multiplier Effect

The **multiplier effect** interacts with the economy exactly as the name would suggest: It multiplies the actions that, for instance, a government takes. Let's say the economy has gone into recession and the government wishes to create some new demand in the economy. For example, the government undertakes a large infrastructure project. The government spending, in this case, goes into the pockets of construction workers, who get income from working on the project. However, the economy is interconnected, and so the change in demand doesn't stop here! Instead, those construction workers will spend the money that they took home as income, buying all sorts of things like food, rent, and entertainment. People work in each of those industries, and so the spending of the construction workers becomes the income of workers in other industries. Likewise, their income will become the spending of still further people, and the cycle continues on and on. Aggregate demand has been stimulated further than just the initial money that was put into the construction project! How much demand is stimulated will depend on the marginal propensities to consume of the individuals in our economy.

The Multiplier Effect Cont.

What we've just described is called the [spending multiplier](#) and is one of the various types of multiplier effects that you'll run into during your AP Macroeconomics review. There are other types of multiplier effects as well. The tax multiplier also effects the actions of [fiscal policy](#), acting in the opposite direction of the spending multiplier. As you get taxed more, you have less to spend in the economy, and this means that there is less income available for workers at the places you usually spend your money! For monetary policy, there is also something called the [money multiplier](#). You can learn more about each of these specific multiplier effects by moving on to on them while you study for AP Macro!

While we won't go into the full details of these multipliers, there are a couple of equations for the multiplier effect that you'll want to know for your AP Macroeconomics review, and that we'll use as we work through a sample free response question. Specifically, you'll need a couple of equations to work with the spending multiplier and the tax multiplier.

To calculate the spending multiplier, you just need to know the marginal propensity to consume. Though, of course, if you have the marginal propensity to consume, you know that the marginal propensity to save is just one minus the marginal propensity to consume. This is the case because you can only either spend or save your money!

The spending multiplier is calculated as follows:

$$\text{Spending Multiplier} = \frac{1}{1-MPC}$$

The tax multiplier is calculated using

$$\text{Tax Multiplier} = \frac{-MPC}{MPS}$$

The Multiplier Effect Cont.

Why is the tax multiplier negative? Remember, while the government providing additional spending eventually multiplies into even more spending, taxes act in the opposite direction! When the government taxes you, that takes away some of the spending that you would've done before the tax, but that spending was the income of one of that store's workers and they would have spent that money as well! In this way, government spending is multiplied to further increase demand in the economy, while additional taxes will multiply to drain even more demand out of the economy.

With these equations and an understanding of the multiplier effect in hand, let's look at an example of what you can expect to see as an AP Macro free response question.

Example

Because you can find plenty more examples of free response questions in our other, more specific multiplier effect posts, we will just work through one question that asks you to use a couple of multiplier effects here. Specifically, the following question is pulled from the [2015 AP Macroeconomics Exam's free response questions](#):

In this free response question, you are told that there is a recessionary gap of \$300 billion and that the government would like to pursue a [fiscal policy](#) to close it. The marginal propensity to consume in this economy is given as 0.8. You are told that the government wants to only use spending to fully close the recessionary gap, and asked what the minimum amount the government can spend is. How would you start working on this question?

Since you're asked how much the government needs to spend to close a recessionary gap, your first thought should be the multiplier effect! You know that the interconnectedness of the economy means that the government doesn't need to spend the full \$300 billion to close that gap. Next, you know that if you need to calculate a multiplier effect, you'll need to know how much of the additional money gets spent by individuals in the economy. That is, you need to know the marginal propensity to consume!

The Multiplier Effect Cont.

Since the marginal propensity to consume is 0.8, you can now calculate the multiplier effect. Here, the marginal propensity to consume means that the multiplier effect is equal to $1/(1-0.8) = 1/0.2 = 5$. So any spending that goes into the economy will be multiplied by 5. This means instead of needing a full \$300 billion to close the recessionary gap, the government actually only needs to spend $\$300 \text{ billion}/5 = \60 billion to close the gap. This is the minimum required change in government spending.

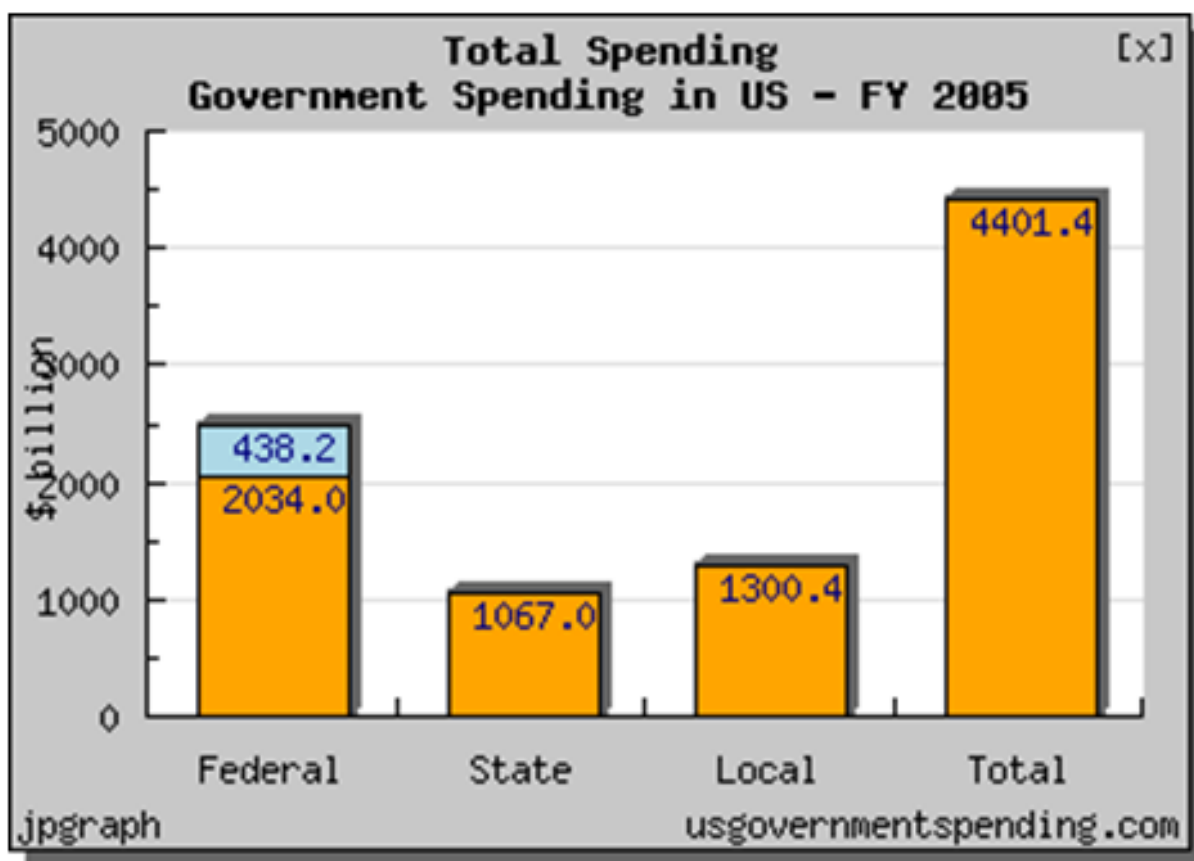
Next, you are asked to consider what would happen if the government used tax cuts instead of government spending to boost the economy. You are asked whether the minimum required change in taxes to close the recessionary gap will be more, the same, or less than the required change in spending. First, you should remember that the sign on taxes is negative! This means that to stimulate the economy, the government needs to be cutting taxes! Once you know that, you can use the equation in the previous section to calculate the tax multiplier. Here, the tax multiplier is equal to $0.8/0.2 = 4$. Where did the negative sign go? Again, you're reducing taxes, so the multiplier here is positive! The multiplier is smaller, so you know that you'll need more of a change in taxes to close the recessionary gap than if the government had used spending.

Why is this the case? Because you'll save part of the extra income that you got from the tax cut!

Conclusion

In this post, you've learned about the multiplier effect. The multiplier effect relies on the fact that everything in our economy is interconnected! Your spending is someone else's income, and their spending becomes another person's income! There are a few specific types of multiplier effects: namely, the spending multiplier, the money multiplier, and the tax multiplier. As you continue with your AP Econ studies, be sure to check our specific posts for each one of those types of multiplier effects! Can you think of other ways that the interconnectedness of our economy could lead to multiplier effects?

The Spending Multiplier



The spending multiplier is a must-know concept for your AP Macroeconomics review. Before working on the spending multiplier, though, you should be sure to check out our other post on the broader concept of the [multiplier effect](#)! The spending multiplier is one particular multiplier within this broader concept. In this post, we'll teach you everything you need to know about the spending multiplier to ace your AP Macro exam!

The Spending Multiplier Cont.

Definitions

First things first, we'll want to get some definitions out of the way. To see how the spending multiplier works, you'll want to know a couple of related definitions. First up is the **marginal propensity to consume (MPC)**. The marginal propensity to consume is the fraction spent from a change in disposable income. Let's break down how that works. Say you decide to mow some lawns for \$110. Even though it doesn't happen in real life, let's assume that the government takes \$10 in taxes. Then your disposable income, or your after-tax income, is \$100. Now, you have two options for what to do with that income: You can spend it, or you can save it! Let's say you spend \$60 and decide to save \$40. Then, your marginal propensity to consume is just the fraction that you decided to spend; in this case, 0.6. This example also lets us introduce a related concept, the **marginal propensity to save**. The marginal propensity to save is the fraction of a change in disposable income that is saved. For our simple example, this works out to 0.4. Notice that the marginal propensity to save and the marginal propensity to consume sum to one. Why do you think this is? Because, for any change in disposable income, you only have two options with what you'll do with it—you can save it, or you can spend it!

Now that you've got these marginal propensities down, we're ready for the focal point of this AP Econ review – the spending multiplier!

The Spending Multiplier

The spending multiplier, sometimes referred to as the government spending multiplier, is crucial to AP Macroeconomics review. This is because it's vital to understanding the steps that a government is likely to take in the face of an economic crisis!

To understand the spending multiplier, though, we first need to think about the interconnectedness of an economy. To do so, let's return to the simple example that we were building previously.

The Spending Multiplier Cont.

Let's say you decide to spend \$60 on a video game. This means that the \$60 you spent now becomes part of the income of the employee at the video game store. In turn, that employee will also spend that money elsewhere in the economy, maybe to buy food at the supermarket. Part of this becomes the income of supermarket employees, and the cycle goes on and on. Your spending has become the income of others, and their spending has become the spending of still more!

So, what does this have to do with the government? Well, let's say the government is facing an economic crisis, a recession. One way the government can respond to try to stimulate the economy is by spending! Spending more will boost aggregate demand, helping to stem the recession. The spending multiplier helps us figure out how much the government needs to spend if it wants to end the recession! What we'll see is that if the spending multiplier is large, the government doesn't need to spend the full amount of the downturn!

Let's say the government decides it needs to close an economic gap caused by a recession. The government does so by, say, building infrastructure. This spending on infrastructure becomes the income of infrastructure or construction workers. Note, though, as in our simple example, the spending doesn't stop there, and so the boost to aggregate demand doesn't stop there! Instead, those workers will spend their income in their local economies, and their spending will in turn become the income of further workers in the economy. It is in this way that the spending multiplier lets us know how much the economy has been stimulated by the government's [fiscal policy](#).

Now that you understand the spending multiplier, you'll need to know how to calculate it. Luckily, there's a simple equation for doing so! The spending multiplier is calculated as follows:

$$\text{Spending Multiplier} = \frac{1}{1-MPC}$$

Now that you've mastered the spending multiplier for your AP Econ studies, let's turn to a few examples to help you see how you're likely to encounter it on an exam!

The Spending Multiplier Cont.

Practice Questions

To ace your AP Macro exam, it won't be enough just to have learned the spending multiplier; you'll also need some practice using it! For our first question, let's look at a free response question from the [2015 AP Macroeconomics Exam](#):

First, let's set the stage for this question: The government is in the midst of a recession, and the recessionary gap is \$300 billion. We're told that the marginal propensity to consume for consumers in our economy is 0.8. The government decides that it only wants to use spending to fully close the recessionary gap. The question is, what is the minimum amount that the government can spend to do so?

To start on this question, first, let's think about what we're given. We're given a government facing a recession that wants to use [fiscal policy](#) and, specifically, spending. We're also told about the marginal propensity to consume in the economy. This information should be a signal to you that they want you to show that you know how to use the spending multiplier! So let's do so! With a marginal propensity to consume of 0.8, we can calculate that the spending multiplier is equal to $\frac{1}{1-0.8} = \frac{1}{0.2} = 5$. So we know that the interconnectedness of our economy means that every dollar the government spends will be multiplied throughout the economy by 5! So how do we calculate the minimum government spending required to close the recessionary gap? We take \$300 billion and divide it by our multiplier, giving us \$60 billion. So, to close the recessionary gap, the government must spend at least \$60 billion.

Now, to make sure that you've got the spending multiplier down, let's work through one more example. This question is taken from the [2008 AP Macroeconomics Exam](#):

Before we get started, this question is going to look very familiar. So, once we've laid out all the details of the question, go ahead and give it a try on your own first! Then, come back and make sure that you fully understand the spending multiplier!

The Spending Multiplier Cont.

You're told that current real gross domestic product is falling \$500 billion short of full employment in this economy. The government is interested in using [fiscal policy](#), and knows that the marginal propensity to consume in the economy is 0.8. You're asked to calculate the minimum increase in government spending alone that would bring the economy to full employment.

Now that you're back, let's see if you got it right! This question looks a lot like our previous question! The economy short of full employment means that it's in a recession, and once again, the government would like to end this recession just by using government spending. This means we're in the perfect spot to use the spending multiplier! Calculating the spending multiplier gives us $\frac{1}{1-0.8} = \frac{1}{0.2} = 5$.

However, in this case, the recession is larger. So, closing the \$500 billion recessionary gap when each dollar in the economy will stimulate it by 5 times that amount means that the government, at a minimum, needs to spend \$500 billion/5 = \$100 billion. Were you able to solve this one on your own? If not, be sure to keep practicing!

Conclusion

In this post, you learned all about the spending multiplier. The spending multiplier relies on the interconnectedness of the economy to show how much aggregate demand can be stimulated by an increase in government spending. It is often used to calculate what the government would need to spend in order to stimulate its way out of a recession. How do you think that taxes interact with the spending multiplier?



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The Money Multiplier



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In this post, you'll learn a key concept for your AP Macroeconomics review, the money multiplier. The money multiplier lies at the heart of banking and [monetary policy](#). This makes it vital for you if you want to ace your AP Macro exam! The money multiplier is one of several multiplier effects that you'll encounter in your AP Econ studies. Be sure to check out our other posts on multiplier effects!

The Money Multiplier Cont.

Money Supply and the Money Multiplier

The **money multiplier** has to do with the money supply and banking. If you don't know about the money supply, take a quick break and [check out our post on M1, M2, and M3](#)! That post will help you not just with your AP Macroeconomics review, but also with understanding the money multiplier! When money is injected into the banking system, it is usually done through the central bank, such as the U.S. Federal Reserve. The Federal Reserve does this through open market operations, in which the Fed will buy and sell government securities in the open market. This is also referred to as [monetary policy](#). When the Fed buys securities, the money supply is increased, since they give cash to banks in return for the securities. Likewise, the money supply is decreased when the Fed sells securities and takes cash out of the banking system. The money multiplier helps us to understand just how much the Federal Reserve is putting money into or taking money out of the banking system increases or decreases the money supply. You might ask, "Wait—when the Federal Reserve puts money into the economy, isn't that number just how much the money supply changes?" Maybe surprisingly, this isn't the case, and by understanding the money multiplier, you'll know why!

Banking

To understand the money multiplier, we'll first need to make sure we have a good handle on how the banking system works. When you deposit money into your checking account, that money doesn't just stay there! The bank takes a certain fraction of your money, maybe combining it with many other depositors' money, and lends it out, say, to someone who wants to buy a new home and needs a mortgage. The reason that the bank only lends out a fraction of other peoples' and your deposits is that the bank needs to make sure that it has a certain amount on hand for you to withdraw if you need it. The bank knows that on any given day, it isn't going to have all of its customers withdrawing their money, and so it keeps a little bit of money for those that will withdraw and then lends out the rest. The fraction that the bank is required to keep is determined by the bank's reserve requirements. For instance, the Fed may decide that banks need to hold onto 20 percent of their deposits.

The Money Multiplier Cont.

Now, to understand where the money multiplier comes in, let's build a simple example.

Money Multiplier

Let's say you deposit \$100 at your bank, and that banks are required to hold 20 percent of their deposits in reserve. This means that your bank will lend out \$80 to someone else. Surprisingly enough, in doing so, the bank has increased the money supply in the economy! How is that the case? Well, that \$80 is now in the hands of someone else, but you're still entitled to withdrawing your full \$100 deposit whenever you need it. Again, banks can do this because they know at any point in time, not all of their depositors will need to withdraw their money. Eventually, that \$80 will make it into the hands of someone else who is likely to put it into their bank. Their bank now also holds onto 20 percent of reserves, but can lend out the other \$64, so that the money supply has increased still further! This process repeats itself in the economy, and that is how when the Fed decides to inject \$100 billion into the banking system, that money gets multiplied, and the money supply increases by more than the \$100 billion in money that the Fed put in! By how much will the money supply increase? That's determined by a simple equation: our money multiplier formula. You'll want to know the money multiplier formula for your AP Macroeconomics review! The money multiplier is equal to one divided by the reserve ratio.

Now that you understand the money multiplier and know how to calculate it, the next step is for us to work through some AP Macro practice questions!

Practice Questions

The first question we'll work through is a free response question from the [2001 AP Macroeconomics Exam](#):

In this question, we are told that Janet Smith deposits \$1,000 of her cash into her checking account at First Federal Bank. They also let us know that the reserve requirement is 20 percent.

The Money Multiplier Cont.

First, let's determine the maximum amount that First Federal is allowed to loan out. As we learned above, we can find this by finding out how much First Federal is required to keep in reserves. This is the reserve requirement multiplied by the deposits, or \$200. This means that First Federal can lend out the rest, \$800.

Finally, you are asked to determine the maximum amount of money that the entire banking system could create. This should immediately make you think of the money multiplier! The money multiplier lets us know this maximum amount by telling us how much money is created in the system if every person in our theoretical chain puts his or her deposit back into the banking system. Using our formula, we can calculate the money multiplier as one divided by the reserve requirement, which is equal to $1/0.2 = 5$. Now that we have a money multiplier of 5, how do we apply it here? Well, we multiply it by the amount of money that was initially deposited into the banking system; in this case, \$1,000! Are we forgetting anything? Yes! The initial \$1,000 wasn't created by the system! So we know that the maximum amount that the banking system itself creates is $\$5,000 - \$1,000 = \$4,000$.

Finally, let's make sure you've really got the money multiplier down by trying one more question. This free response question is taken from the [2004 AP Macroeconomics Exam](#):

We are told that the Federal Reserve has bought \$5,000 in bonds from Clark Consulting Services, which deposits its money into its checking account at First Generation Bank. First, we are asked what the change in the money supply is if the reserve requirement is 100%. What do you think it is? When the reserve requirement is 100%, this means the bank has to keep all that money in its vault! So the money supply has only increased by \$5,000. We can also see this through the money multiplier! The money multiplier with a reserve ratio of 100% is one divided by one, which equals one. Multiplying this by the initial \$5,000 gives us that the money supply has increased by that \$5,000 alone. Finally, we are asked a couple questions about the Fed dropping the reserve requirement to 10 percent. How much can the bank lend out? Well, at 10 percent, First Generation Bank only has to keep 10 percent times \$5,000, or \$500, on hand. This means that First Generation can lend out \$4,500.

The Money Multiplier Cont.

What about the total money supply? What is the maximum increase in the total money supply due to the Federal Reserve's bond? To find this, we'll once again need to calculate the money multiplier! At a reserve requirement of 10 percent, the money multiplier formula tells us that the money multiplier is $1/0.1 = 10$. Now, notice in this case we are not asked how much money the banking system itself created, but rather the total maximum money supply created by the bond purchases. This means that all we have to do is multiply the initial purchase amount by our money multiplier, giving us a maximum increase in the total money supply of \$50,000.

Conclusion

In this post, you learned all about the money multiplier. The money multiplier is essential to understanding the banking system and [monetary policy](#). This means that it is one of the most important concepts to know in your AP Econ review. So make sure that you've got this concept down! Once you've done that, be sure to have a look at some of our other posts on multiplier effects. Can you find the similarities between these?

Crowding Out Effect

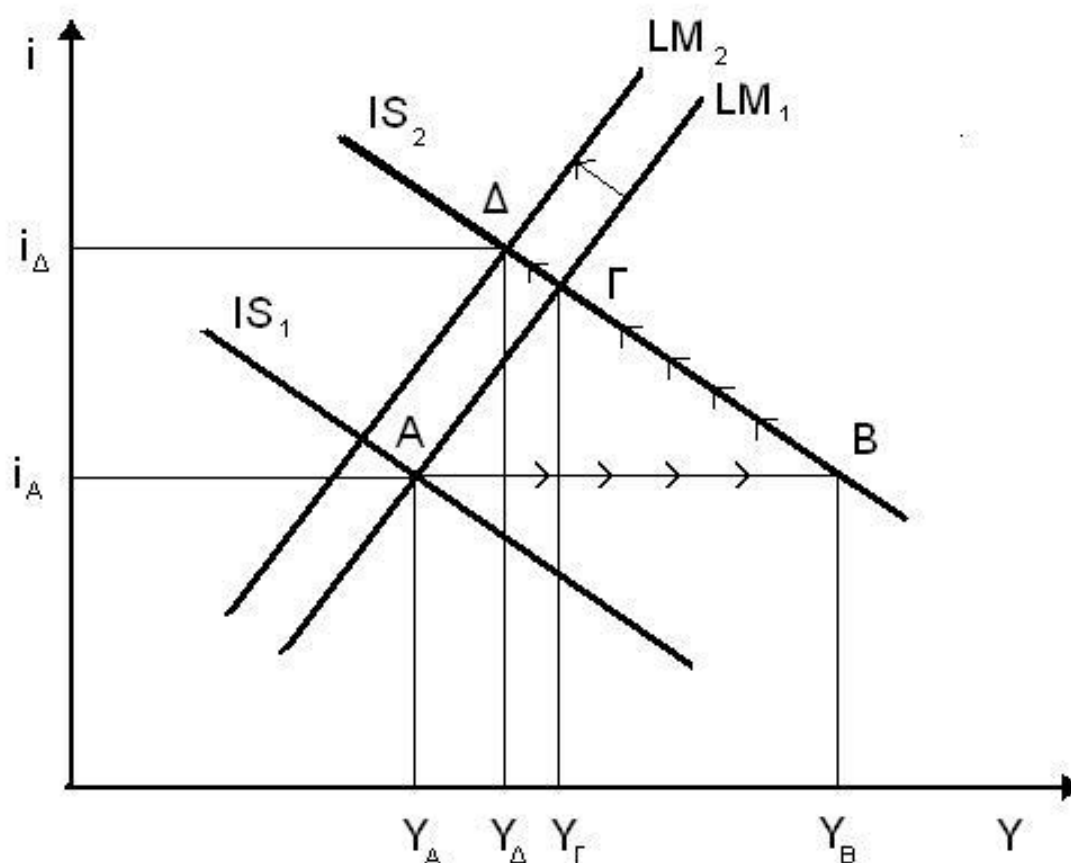


Image Source: [Wikimedia Commons](#)

If you're studying for the AP Macroeconomics exam, you'll definitely want to understand the crowding out effect. So what is the crowding out effect? In this post, you'll learn about the impact of the crowding out effect, but first, let's review a little bit of government [fiscal policy](#) and supply and demand in the loanable funds market.

Crowding Out Effect Cont.

Some Review

To understand how the crowding out effect occurs, first you'll need to know how government fiscal policy operates. [Fiscal policy](#) refers to the way in which governments use their taxing and spending policies to influence the economy. For example, when the economy enters a recession, the government may want to attempt to stimulate the economy by spending more, maybe engaging in a large-scale infrastructure project. Let's say the government decides to implement this infrastructure project—what options does the government have to pay for the project? Well, the government could raise [taxes](#). However, during a recession, the government is interested in trying to stimulate the economy, and tax increases could do the opposite. So if the government doesn't want to raise taxes, what other option does it have? The government could borrow money! Borrowing money allows the government to spend more than it takes in; when this happens, it's called a **budget deficit**.

How might this budget deficit affect the economy? Well, one way to view it is through the loanable funds market, and doing so shows the impact of the crowding out effect. The **loanable funds market** simply refers to the market for loans. We can think of it through our usual visual of supply and demand in a market. The supply of loans slopes upward: As the real interest rate goes up (think of the real interest rate as being the price of a loan), you're willing to supply more loans to the market. When you loan out money at a high interest rate, you're getting a lot of money over time with each payment. Also as expected, the demand for loans slopes downwards. As the real interest rate goes down, you demand more and more loans. Since the interest rate is low, you know that you can borrow money to buy, say, a house very cheaply, and this incentivizes you to borrow.

Now that we understand government fiscal policy as well as supply and demand in the loanable funds market, we're ready to find out what the crowding out effect is.

Crowding Out Effect Cont.

Crowding Out

The impact of the crowding out effect is that government [fiscal policy](#) can have unexpected effects when you consider the market for loanable funds. Specifically, crowding out works as follows. The government decides that it would like to increase spending. As we've said, the government might do this in an attempt to stimulate the economy and pull it out of a recession. However, the context of this recession means the government may not want to increase [taxes](#). So instead, the government decides to borrow money in order to finance its increased spending. In our simple supply and demand example of the loanable funds market, the government running a deficit shows up as increasing the demand for loanable funds. Think of it like this: At any given interest rate, there was already a certain amount of private demand for loans. Now, on top of that private demand, the government also demands a loan to finance its deficit. This has the effect of pushing the demand curve to the right. However, when the demand curve is pushed to the right, this means that the equilibrium has changed. In order to have supply equal to demand with higher demand at all interest rates, this means that interest rates have to increase! Now, what do you know happens to private investment when interest rates have increased? Private investment falls! Because of higher interest rates, fewer private sector individuals want to take out loans, and these loans were going to be used to finance private investment! This is what is referred to as the **crowding out effect**. So, what is the crowding out effect? It is the way in which government borrowing can crowd out private borrowing, and therefore private investment.

What about the Exam?

Now that you've got a handle on the impact of the crowding out effect, let's look at what you can expect to see on the AP Macroeconomics exam. To see what you can expect, let's work through a couple of previous AP Macroeconomics free response questions that relate to the crowding out effect. First, we'll look at a free response question from the [2015 AP Macroeconomics exam](#):

Crowding Out Effect Cont.

In this question, we are told to assume that the government lowers income tax rates to close a recessionary gap. One of the questions then asks us whether long-run [aggregate supply](#) will increase, decrease, or remain the same, and to explain why. While there are a number of possible answers here, one of the answers that we could give involves the crowding out effect! What is the impact of the crowding out effect in this case? Well, we know that if the government lowers income taxes but doesn't decrease spending, it will run a budget deficit. This deficit then crowds out private investment, but decreased private investment means that in the long run, our economy simply won't be able to supply as much in aggregate! So by using the crowding out effect, we see that one of the impacts of the government lowering income tax rates to close the recessionary gap is to decrease long-run aggregate supply!

Finally, let's close with a question that asks you to fill in a little more of the story on your own. This free response question is pulled from the [2002 AP Macroeconomics exam](#):

First, you are asked to identify a [fiscal policy](#) action that Congress might initiate to decrease a high rate of unemployment. To decrease [unemployment](#), Congress will want to increase [aggregate demand](#), so we have a couple options here, both of which we referenced earlier. What are they? Well, Congress may decide that it should boost spending to increase aggregate demand, or Congress may decide that it should cut [taxes](#) in order to boost aggregate demand. Then, you are asked to explain how whichever policy you identified will affect short-term interest rates. How do you think you should proceed? By thinking about the impact of the crowding out effect! Either policy would lead to deficit financing of the government. This means that the government has increased the demand for loanable funds. As we've seen, this pushes the demand curve to the right and raises the interest rate. It was exactly this higher interest rate that is behind the decrease in the private demand for loans, and hence private investment – the crowding out effect. So by knowing what the crowding out effect is, we know that either of our proposed policies has the effect of increasing short-term interest rates.

Crowding Out Effect Cont.

Conclusion

In this post, you learned about the impact of the crowding out effect and how government intervention in the market for loanable funds may have unintended consequences. Knowing the crowding out effect is a critical part of any AP Macroeconomics review. Now that you understand the crowding out effect, what do you think is a reason that a government still may want to run a deficit? Let us know in the comments!

Financial Assets



[Image Source: Wikimedia Commons](#)

You may have realized in your AP macroeconomics review that there are many different types of assets. There are two overarching categories of assets, tangible and intangible assets, and then many smaller categories that make up those assets. While they vary in complexity, we are going to look at probably the most complex type of assets: financial assets.

Financial assets are tangible; this literally means you can touch the asset. However, due to digitalization today, many financial assets are no longer tangible, but rather they hold value based on the contract that was signed to make them. For example, if you transfer your money from your bank account to another bank, then your bank has lost a financial asset, while the other bank has gained a financial asset.

Financial Assets Cont.

While no money was physically exchanged between banks, there is still a value of money that both banks should uphold. Likewise, if you physically deposit money in your bank, then your bank is contractually obligated to be able to provide that money to you if you demand it. The money you physically receive will not be the same money you deposited, but it will still have the same value.

There are many different ways that financial assets work, and different financial assets may change their value over time, either appreciating or depreciating in value, or both. How easily it appreciates or depreciates is a measure of how risky that asset may be, which means how likely you are to gain or lose money from investing in that asset. The basic types of financial assets are, in order from low risk to high risk, money, bonds, and stocks.

Money

Money is the most basic financial asset you can own, and it is the most reliable source of value. In the United States, the Dollar has generally been one of the most stable currencies in the world, and therefore investing with dollars is very low risk. Money is always emitted by a government entity to signify the central bank's commitment to that money's value.

Essentially, every dollar and cent that you own has been emitted by the Federal Reserve as a sort of loan. In this way, the bills and coins that make money represent a contractual obligation between the United States and the bill holder. Therefore, money is considered a financial asset.

Money is circulated through the economy by way of the [Federal Reserve System](#) and its relationship to the banks. The Federal Reserve loans its money to banks, who then loan out the money to clients and businesses. The money in those loans is eventually used to pay your salary, and then you use that money to buy goods.

You can choose to save your money in a bank, which means it will appreciate in value over time while the bank holds it. When you deposit that money, as previously mentioned, it becomes a financial asset for both you and the bank.

Financial Assets Cont.

The bank will use that money to make further loans, while also allowing your savings to appreciate in value over time as an incentive for not withdrawing the money.

Money is the basic unit of exchange in any economy. You use money every day in exchange for nearly every aspect of your life: food, shelter, and services such as water or electricity. It is also the basic unit that makes up the value of all other financial assets.

The ease at which you can exchange money for these services means that money is highly liquid as well. Liquidity means that the asset can be easily exchanged without any drastic change in the asset's price.

Bonds

Bonds are a strange sort of financial assets that vary in risk depending on the entity issuing the bond. They have a pivotal role in how the government and corporations gain money for projects and other activities. Bonds that are issued by the United States government are considered to have a low risk.

Let's say you decide to buy a government bond. When you buy the bond, you are essentially lending the government money in exchange for the bond. As a bond holder, you are considered a debt holder or creditor to the United States government.

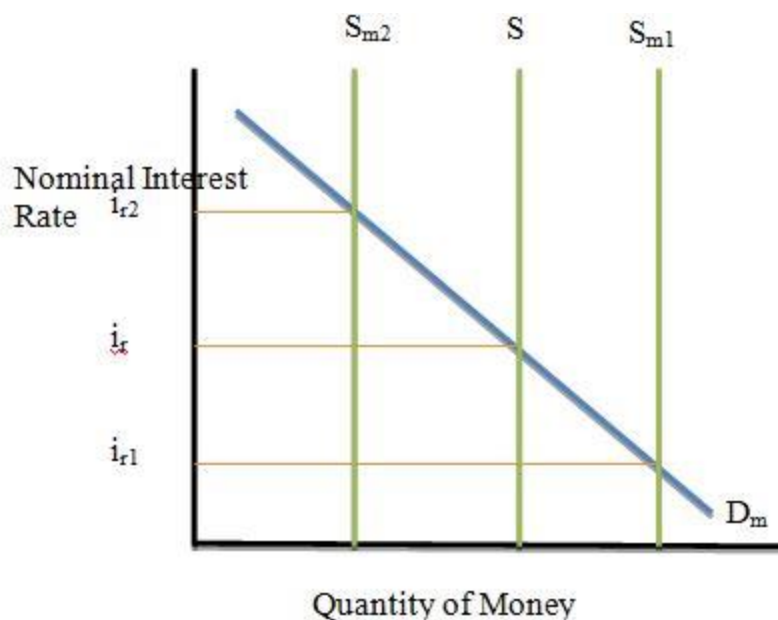
The government borrows your money for a certain length of time as detailed in the bond's note that is issued to you at the time you decide to buy it. This length of time is known as the bond's lifetime. When the bond's lifetime ends, it is considered to have reached its maturity date.

As the bond matures, it will accrue interest that is guaranteed to you by the government as an incentive to invest money. The interest rate is set by the government itself and it raises or lowers the interest rates depending on the state of the economy. Your bond can have a fixed interest rate, meaning the interest rate does not change over time, or variable interest rate, meaning the interest will change according to the rate during the bond's lifetime.

Financial Assets Cont.

Government bonds are generally sold at fixed interest rates. That makes them more desirable to purchase when the interest rates are high and less desirable when they are low. The government therefore takes advantage of the effects the interest rate has on demand for bonds to increase or decrease the [money supply](#).

Below is an example of how the interest rate affects demand for money:



As demonstrated by the graph, when the interest rate increases, the money supply falls. When it decreases, the money supply increases.

When the bond matures, it no longer accrues interest. At that point in time, the government will have to pay you back for the bond as soon as you take it to be exchanged.

In short, bonds are relatively safe financial assets, depending on where you are lending the money. They take a long time to accrue value and the gains on the original investment are small, but guaranteed, especially in the case of United States Treasury bonds.

Financial Assets Cont.

Stocks

Stocks are probably the most well-known financial assets, but the way they work can be very complicated. That is because there are so many of them and they are so volatile. As an investment, they offer high reward with a trade off of being high risk.

In order to provide an example of how stocks work, let's imagine you want to start a business. In order to start this business, you need \$100 dollars. Unfortunately, you only have \$55 dollars, so where are you going to get the rest of your money?

This is where business investors come in, who will be your friends in this example. In order to reach your required \$100 dollars, you pitch your business idea to your friends. You have three friends who agree to put in money with your idea.

The first two friends put in just \$10. The third friend puts in \$25 dollars. With these investments, you now have enough money for your company. The investments that your friends have put in are considered a stake in your company in exchange for a share in the eventual profits your company makes.

The stakes your friends made with their investments are represented by a percentage of the overall value of the company. Essentially they own that stake in the company, meaning the first two friends have a 10% stake and the last friend has a 25% stake. They can choose to pool their stake in the business, meaning they will represent a 45% stake in your company while you own 55%.

The value of stocks increase as the value of the company increases and likewise decreases if the company loses value. So, if the value of our business goes to \$200, then the value of the investor's stake will increase by 100%. That means a \$10 dollar investment is now valued at \$20 with a \$10 profit.

Investors essentially play the stock market by buying and selling stocks according to how businesses and industries are performing, as well as the general performance of the economy. They can trade these stocks with other investors or sell the stock back to the company at a gain or loss.

Financial Assets Cont.

Stocks are so risky for two reasons. First, they tend to rise and fall based on investor perceptions, meaning that a business that performs badly will have its stocks fall as investors begin to pull their investments. Second, they depend entirely on the performance of the economy itself and if the economy takes a sudden downturn then all stock values will fall.

Stocks are financial assets because they represent a contractual obligation for the company to return your investment as represented by the number of stocks you own in that company.

Financial Assets on the AP Macro Exam

Financial assets will most often be featured on the exam in the form of calculations of a bank balance sheet. In this balance sheet you will have to measure the bank's assets versus its liabilities, or the money it owes. Most of the time, these questions will require calculating the change in the bank's balance sheets when it buys or sells bonds.

For example, here is a question from the [CollegeBoard](#):

3. Sewell Bank has the simplified balance sheet below.

Assets	Liabilities
Required Reserves: \$2000	Demand Deposits: \$10000
Excess Reserves: \$0	Owner's Equity: \$10000
Customer Loans: \$8000	
Government securities (bonds): \$7000	
Building and fixtures: \$3000	

Financial Assets Cont.

(a) Based on Sewell Bank's balance sheet, calculate the required reserve ratio.

(b) Suppose that the Federal Reserve purchases \$5,000 worth of bonds from Sewell Bank. What will be the change in the dollar value of each of the following immediately after the purchase?

(i) Excess reserves

(ii) Demand deposit

(c) Calculate the maximum amount that the money supply can change as a result of the \$5,000 purchase of bonds by the Federal Reserve.

(d) When the Federal Reserve purchases bonds, what will happen to the price of bonds in the open market? Explain.

(e) Suppose that instead of the purchase of bonds by the Federal Reserve, an individual deposits \$5,000 in cash into her checking (demand deposit) account. What is the immediate effect of the cash deposit on the [M1 measure](#) of the money supply?

Conclusion

Financial assets are an important part of the economy today because they are the most liquid assets that can be exchanged in an economy. Money is the most liquid because it can be readily exchanged for goods, while bonds are the least liquid because their tradability rests on the date the bond will mature.

On the AP macro exam, you will have to show how these assets contribute to the economy and how they retain their value. For example, you will have to show how the value of a stock will appreciate or depreciate depending on the overall value of a business. You will also have to demonstrate why bonds play a pivotal role in government spending.

Learning how these assets play a role in the economy is a key factor in [understanding modern macroeconomics](#).

Monetary Policy



[Image Source: Wikimedia Commons](#)

You may have heard about the Federal Reserve from the news, such as when it adjusts interest rates or starts to buy bonds to increase the money supply. Federal Reserve's monetary policy works in conjunction with the government's [fiscal policy](#) to control the economy's stability.

It should be noted that the Federal Reserve is an independent entity from the national government. While it was created by an act of Congress, the only governmental intervention into the Federal Reserve's actions comes from presidential appointments to the leadership positions in the bank. It otherwise runs independently based on its own policy goals and the opinions of private bankers.

An additional note should be made that the Federal Reserve is just one example of monetary policy in the world. The system of Federal Reserve banks acts as a central bank that is equal to the Bank of England for the United Kingdom or the Bank of Japan. The AP Macro exam almost exclusively concentrates on the actions of the Federal Reserve.

Monetary Policy Cont.

What is Monetary Policy?

Monetary policy is created through the actions of the central bank on the money supply and interest rates. It works to either create a business friendly economy to spur employment and growth, or a policy to reduce national spending to try to lower the [inflation](#) rate.

It has three ways of controlling the economy:

Options	Actions
Open Market Operations – Buying or selling bonds on the open market	Buying and selling bonds to increase money supply
Reserve Ratio – The amount of money banks are required to keep in reserve before lending.	Raise or lower the ratio to affect how much a bank needs to save
Discount Rate – The rate the government charges banks for borrowing money.	Raise or lower the interest rate

Much like the federal government’s [fiscal policy](#), the Federal Reserve’s monetary policy has two types of policies to control the economy. The policy it chooses to use depends on the economic outlook in both the long run and short run. The two types of policy are:

I. Contractionary Policy

During inflationary periods the Federal Reserve will attempt to reduce [inflation](#) by taking actions that increase savings and reduces spending. These two effects will eventually lower the price level in the overall economy. This is done through one of the three actions.

1. The Fed may participate in the money market by selling government bonds, which reduces the money supply and therefore the price levels.

Monetary Policy Cont.

2. The Fed can raise the reserve ratio, which increases the amount banks have to save. They therefore cannot lend as much as before and this reduces the amount of money in the economy.
3. The Fed can raise the discount rate, which means that banks are charged more for borrowing from the Fed. This will lower demand for borrowing and therefore lower the money supply.

II. Expansionary Policy

During recessionary periods the Federal Reserve wants to increase [inflation](#) and employment in order to spur the economy. The Fed gives incentives to banks and businesses by increasing the money supply which therefore increases spending.

1. The Fed buys government bonds, which is a sort of loan the bank or private entity makes to the Fed with a low interest rate. Buying bonds increases the money supply by giving lenders back their money, plus interest.
2. The Fed lowers the reserve ratio, which therefore allows banks to lend more money to borrowers. This increases investment and spending.
3. The Fed can lower the discount rate, which makes borrowing from the Federal Reserve more desirable. Banks will ask for more money and the money supply will increase.

To sum up the two policies, you have to understand that the Federal Reserve has two options depending on the state of the economy. It can increase the money supply and therefore increase investment and spending, or decrease the money supply to the opposite effect. In addition, it can control interest rates of government loans that regulate how much a bank will borrow.

Monetary Policy Cont.

The Effects of Monetary Policy on Banks

Most questions involving AP econ monetary policy will involve figuring out how profitable a bank is and how the reserve requirement ratio affects the bank's balance sheet. The balance sheet is an overall review of all of the bank's money. It is calculated as the bank's assets, or the money it owns, versus its liabilities, or money that has been borrowed and it owes.

The bank's balance sheet should be balanced; meaning the amount of liabilities has to equal the amount of assets. Let's say you own a bank, here is what your balance sheet might look like:

Situation 1:

Assets	Liabilities
\$50 Reserves	\$100 Demand Deposit
\$40 Excess Reserves	
\$5 loans	
\$5 bonds	

Looking at the balance sheet, you can see that there is a value of \$100 on each side, showing that your bank is balanced between its assets and liabilities. The only liabilities you have for now are known as "Demand Deposits." These are the deposits made by your clients and you have to be able to pay out that money if the clients demand it. The reserve is the amount the Federal Reserve requires that you keep on hand in case there is a run on your bank. In your AP macroeconomics review, you will have to figure out how much this reserve percentage is based on a balance sheet. According to the above balance sheet, your bank currently has to reserve 50% of its deposits, or \$50 for every \$100 in Demand Deposits.

Monetary Policy Cont.

Situation 2:

Assets	Liabilities
\$50 Reserves	\$150 Demand Deposit
\$40 Excess Reserves	
\$5 loans	
\$5 bonds	

Now we change it where your bank has received a deposit of \$150. According to the reserve ratio of 50%, you have to reserve 50% of your client's deposits and then you can use the rest of the deposit however you please by either loaning the money out or keeping it as excess reserves. This situation might result as follows:

Situation 3:

Assets	Liabilities
\$75 Reserves	\$150 Demand Deposit
\$50 Excess Reserves	
\$10 loans	
\$15 bonds	

As a result of the reserve requirement, your bank has added \$25 of the \$50 deposit to your reserves. You then went on to add \$10 to your excess reserves. The other \$15 is lent out as loans or used to buy government bonds (\$5 and \$10, respectively).

Monetary Policy Cont.

On the AP Macro test, you will have to figure out the reserve ratio and then how this ratio affects how the bank will use its money afterwards, as shown in the above example. Conversely, you will have to make the appropriate changes in the case of a withdrawal from the bank (say, a customer takes out \$50).

The Effects of Monetary Policy on International Exchange

Specific monetary policies also affect the way consumers buy and sell a currency on the international exchange market. Additionally, it affects the imports and exports of a country. Because the dollar is as influential as a medium of exchange throughout the world, the Federal Reserve's policies are closely watched by economists.

In the event of contractionary policy, the Fed will begin reducing the money supply. As stated previously, this causes people to save more and buy less. Because this lowers prices throughout the country, the value of the dollar goes up. This negatively affects exports, as other countries will be less likely to buy more expensive products from the United States.

In contrast, during expansionary policy the Fed increases the money supply. As a result, people spend more and [inflation](#) rises, lowering the value of the dollar. On an international scale, the market will begin buying more dollars and products that are priced in dollars as they take advantage of lower costs and exchange rates.

Many people try to make money from these fluctuations by buying a currency when it is worth less and then selling it when it is in higher demand. This is a very risky practice because it is hard to tell when the central bank will increase or decrease the money supply. It also requires paying attention to two economies at once, as it implies saving in one currency while waiting for the other to depreciate.

Monetary Policy Cont.

Conclusion

Monetary policy is the way that a country's central bank attempts to control the economy. It does so by using various methods to increase or decrease the money supply. Increasing or decreasing the money supply is seen as either expansionary or contractionary policy.

The way the Federal Reserve controls the United States' economy also has an effect on the international economy. Today, the Federal Reserve has been keeping interest rates close to 0% in an effort to spur more investment and continue recovery from the 2008 Financial Crisis. This is an example of how the Federal Reserve is using expansionary policy to help the economy.

However, this policy is not sustainable forever and eventually you might notice the signs of a contractionary monetary policy. In current headlines, many business savvy people are speculating that the Federal Reserve Board's current chair is planning on raising interest rates for the first time since 2008. It will be interesting to see how this policy will affect the economy at large.

Fiscal Policy



[Image Source: Wikimedia Commons](#)

Until the Great Depression, the government would have a hands off stance towards the economy. When a depression hits, Congress and the President would leave the fate of the economy to its own devices. The economy would then be regulated by businesses and the amount of money the government wants to print.

The economy is made up of a constant series of ebbs and flows, or peaks and troughs. During the time period before government intervention in the economy, these ebbs and flows were uncontrollable and potentially devastating. There were often panics and bank runs. During the 1920s, it was no different.

Fiscal Policy Cont.

The 1920s are known as the [“Roaring Twenties”](#) for a reason. The economy was doing great and people were constantly making more money. Americans would consume more, which meant high demand and therefore high production. Eventually production was so much that it outpaced demand and businesses were overproducing.

Despite this, the companies continued to produce, figuring this was the only way to keep the economy going. Eventually, in 1929, the companies began to fail due to overproduction and no revenue. Their stocks became worthless. This was the beginning of the Great Depression and [President Hoover](#) took the normal stance that the economy would eventually sort itself out.

Come 1932, Hoover had eventually attempted to fix the economy through the use of the newly designed Keynesian economics. Unfortunately, it was too little, too late and the economy was already in a full depression. That’s when Franklin D. Roosevelt came in with his New Deal. This was the official beginning of fiscal policy in practice.

What is Fiscal Policy?

Roosevelt’s fiscal policy as part of the New Deal did not stimulate the economy as hoped, mainly because it was doing so poorly by the time he took office. It took the outbreak of World War II and a surge in production to get the economy going, however, the precedent of the government’s fiscal policy remained.

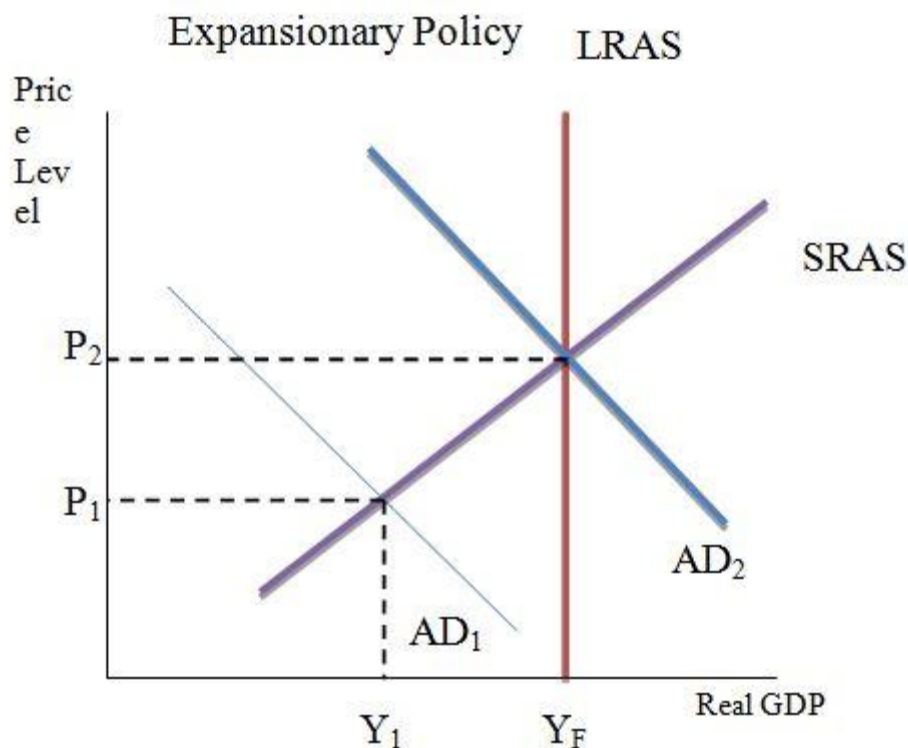
Fiscal policy in the United States basically refers to how the government manages the budget in times of crisis. Before the Depression, the government’s budget was small because it did not bother to take on too many responsibilities. However, after the Depression, the theory came in that spending more money would boost the economy’s performance.

Fiscal policy therefore refers to the actions and precautions the government takes to intervene in a recession or prevent one altogether by actively participating in the economy. In the [context of AP macro](#), there are two types of fiscal policy.

Fiscal Policy Cont.

1. Expansionary Policy

When a recession hits, people buy less due to either losing work or saving up. This means that output falls as well as demand. The government aims to expand the economy by stimulating demand. This can be done by increasing spending to create programs such as public works (thus employing people and giving them a wage to spend money) or by reducing [taxes](#) (people have more money to spend). Expansionary policy can be presented on a graph as shown:



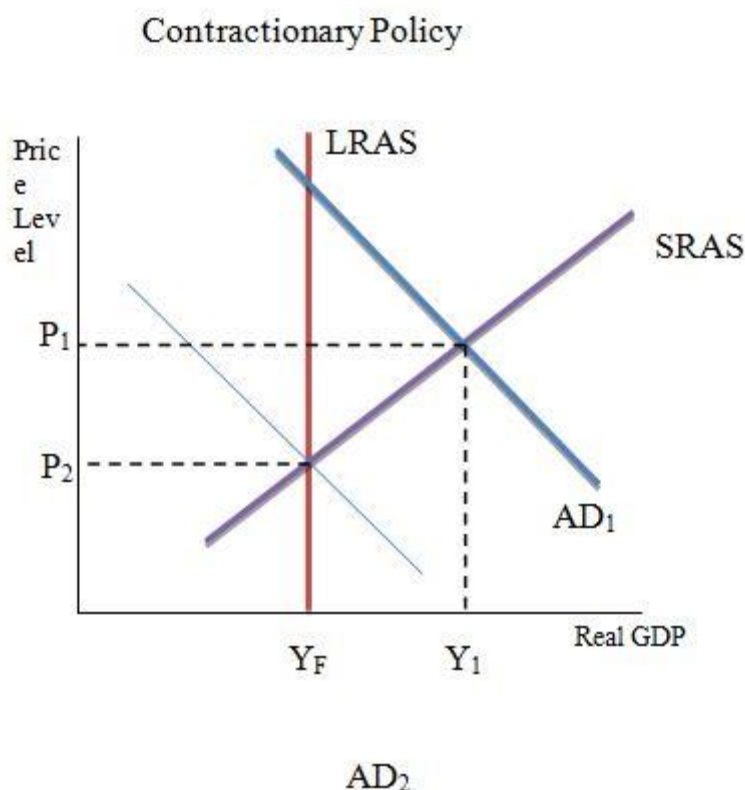
As presented in the graph, the government enacts policies which increase demand. In theory, this policy will increase [short run aggregate supply](#) (SRAS) while also increasing the price level (AP Macro Review: As demand grows, prices increase). When demand and price levels grow, so too does the GDP (the total output of the economy). GDP growth means the economy has exited the recession.

Fiscal Policy Cont.

It should also be noted that in any policy the [long run aggregate supply](#) (LRAS) remains the same. That is because any fiscal policy is temporary and only meant for the short run. According to this theory, there should be recovery in the long run and ideally GDP will be at a higher level than it was.

2. Contractionary Policy

In contrast, contractionary policy is as shown:



As you can recall, fiscal policy is a short term solution. Eventually it has to end. If a government pursues expansionary policy for too long, spending will cause a deficit and increase the money supply. Increasing money supply will cause [inflation](#) and prices will rise too high for regular consumption. In order to combat this, the government will enact contractionary policy.

Fiscal Policy Cont.

As shown in the graph, contractionary policy aims to decrease [aggregate demand](#), which in turn reduces the short run [aggregate supply](#) and therefore the long run aggregate supply. This reduces the output of the economy (real GDP) and price levels.

How does Fiscal Policy Work?

Now that you know what fiscal policy is, you should figure out what it means. As part of your AP Macroeconomics review, you need to know the reasons why a government enacts policies so as to understand why these policies work. In short, expansionary policy is to combat a contraction in the economy and contractionary policy is to combat over [inflation](#).

The economy goes through cycles, which are collectively known as business cycles. If you were to plot a graph of the economy where the GDP represents the economy and is represented by a line running over time, you would see that line dip and rise. When the line dips it is called a recession. The lowest point of that dip is the trough, and then there is a rise in the economy to a peak. The peak is the turning point to where the economy dips again to another trough.

GDP is the measure of all production in the economy. In the long run, GDP should always be increasing, which means it would be a straight line. The short run GDP is what determines a dip or rise in the economy. When the economy is in a dip for more than one quarter (3 months), then it is in a recession and experiencing negative growth. Real GDP, as shown in the graph, does not necessarily reflect the growth of the economy as a whole but rather shows the short term effects of the policy on prices.

What fiscal policy aims to do is combat the effects of a recession to make sure it doesn't spiral into a depression, which is either a recession lasting 2 or more years or a decline in real GDP exceeding 10% of when the recession started. As previously stated, recessions are a normal part of the [business cycle](#) and reflect a healthy economy.

Fiscal Policy Cont.

When a government enacts expansionary policy it is meant to put the economy on the track of recovery and stop a trough short of becoming a depression. Increasing spending and decreasing taxation helps to make this possible by increasing demand, which increases consumption and helps the economy grow. Expansionary policy is important during moments of crisis that cause an unexpected shock.

Contractionary policy is much more controversial. It is essentially a government sanctioned miniature recession that is meant to reduce spending to help control inflation. While [inflation](#) means growth of the economy in the short run (i.e. growth of real GDP) this is not reflective of the state of the economy. Increasing price levels means that consumption is high, but unsustainable.

Every time the price level increases, the unit of currency will buy less. Over time, this will stifle consumption and demand to the point of causing a recession. Contractionary policy is meant to create a recession in anticipation of a future recession from lack of demand. This way, the government can manage the recession in order to keep the economy from spiraling out of control.

There are two forms of enacting this policy: either cutting spending or increasing [taxes](#). Politically, increasing [taxes](#) is extremely unpopular and can cause the politician to lose their jobs (as happened with George H.W. Bush). The second option, cutting spending, is therefore a much more desirable option because its effects are less readily visible to voters.

Ideally, governments should be able to foresee patterns in the [business cycle](#) and enact the correct policy according to what is appropriate. However, the government cannot necessarily control the long run effects of the fiscal policy. This can lead to hyperinflation in the case of too much expansionary policy or scarcity in the case of too much contractionary policy.

Fiscal Policy Cont.

Conclusion

The government uses fiscal policy to help control the effects of the [business cycle](#) on the economy and GDP growth. Expansionary policy increases demand and helps spur growth in the short run. Contractionary policy is used to curtail too much growth that could eventually lead to a major recession. The relationship between these two policies, in theory, helps to create a “flatter” cycle.

There is much debate over whether or not these policies are truly effective in the economy. Indeed, the first enactment of fiscal policy, the New Deal by Franklin D. Roosevelt had a minimal effect on the depression. This is due to the fact that the government’s policy is at the whim of the severity of the shock that caused the recession in the first place.

In the context of an AP macroeconomics review, however, these fiscal policies are enacted in the moment of either [inflation](#) (contractionary) or a recession (expansionary) with the aim of controlling demand and decreasing or increasing the short run aggregate supply.

Taxes



[Image Source: Flickr](#)

Ever wondered why former U.S. president, Benjamin Franklin likened taxes to death? There is nothing you can be more certain of than these two. You can also be sure that taxes will be part of the AP Macroeconomics exam.

Taxes are critical for any government to function and have an impact on the well-being of a country's economy. It is imperative for us to distinguish the types of taxes; know its impact in the context of AP macro, and understand the tax multiplier. In this article, we will also help you prepare for the AP econ exam by reviewing a typical FRQ.

Taxes Cont.

Why are Taxes Important in AP Econ?

In a market economy like the United States, business is primarily run by the private sector and consumer demand. However, the government considerably influences economic decisions. This is done under the objectives of economic growth and egalitarian distribution of wealth. The popular ‘pie’ debates by politicians will often focus on economic growth, make the pie larger or wealth redistribution, and have equal pieces.

The government also gets involved in the economy by purchasing resources from households and buying products from firms; and providing public goods and services. To execute such functions, the government has to raise funds. Taxes offer an efficient way to raise funds for its functioning, pursue income redistribution and economic growth. All citizens have an obligation to pay taxes whether an individual or a corporate.

Taxes can either be progressive, regressive or proportional. With progressive, high-income earners or the wealthy, pay a bigger fraction of their income in taxes. The opposite happens with regressive. Here, people of lower income part with a larger proportion of their earnings in taxes. Proportional, on the other hand, don’t discriminate, the same ratio is collected from every tax payer.

By imposing taxes, the government influences the decisions made by firms and also affects the assortment of commodities produced or purchased. Let’s see how the various types of taxes influence consumers and producers alike.

Impact of Taxes

Progressive taxes aim at reducing inequalities and encourage the take up of low paying jobs. An excellent example of progressive tax is the Federal Income Tax. Here’s how it influences the consumer.

Taxes Cont.

For an individual who earns say about \$ 500 a week, every dollar is crucial to meet his or her living costs. Thus, money taken away in taxes will have a more impact on the lifestyle of such a consumer, in turn, it affects production. On the contrary, a person who earns \$ 10,000 a week would feel little or no change in their lifestyle in case an additional dollar is taken away in taxes.

Progressive taxes leverage on the diminishing marginal utility for money as income increase. That is to say, at higher income levels, there is reduced marginal utility of cash. Thus, by imposing a higher tax on high-income earners, there is a lower impact on consumption which in turn has a lower impact on production and economic growth.

On the other hand, if the taxes are too progressive, they discourage wealthy people and successful businesses from investing or settling in the particular area, thus slackening economic growth. This explains why Federal taxes are the more progressive tax systems than state tax regimes.

Regressive taxes often come in the form of tariffs employed uniformly across the board irrespective of the income level of the taxpayer. Thus, the lower income earners part with a higher fraction of their income as compared to the high-income earners. A good example of a regressive tax is user fees charged for services such as the issuance of drivers' licenses or entrance fees to government parks.

Regressive taxes reduce aggregate demand and have an adverse impact on economic growth. They are applied mainly to products or services which have an inelastic demand.

Proportional Taxes are also referred to as 'flat' taxes. Here, all taxpayers remit the same fraction of their income in taxes.

Taxes Cont.

For example, if the tax rate is 10% the below table shows how much will be collected in taxes from taxpayers of different income levels.

Fig 1. Distribution of a flat tax across different income levels

Weekly Income level in U.S. \$	Amount of U.S. \$ Collected in Taxes
500.00	50.00
1,000.00	100.00
1,500.00	150.00
2,000.00	200.00
20,000.00	2,000.00

Sales tax is often put in this category however this is debatable.

Effective Tax Rate

The average rate at which an individual or corporate is taxed is known as the effective tax rate. This is what is widely used in macroeconomic reviews.

When the government imposes higher taxes on its citizenry, it reduces the disposable income available. Likewise, when the government eases the tax burden, there is more disposable income available to the people. Invariably, the extra income due to reduced taxes is distributed between savings and consumption.

[MPC or the Marginal Propensity to Consume](#) denotes the percentage of additional revenue that is expended.

Taxes Cont.

It is a fraction of the change in consumption divided by the change in disposable income as shown below.

$$MPC = \frac{\Delta C}{\Delta DI}$$

In the same way, the percentage of additional income that is not spent is known as the [Marginal Propensity to Save \(MPS\)](#). It is expressed the proportional change in savings divided by the change in disposable income

$$MPS = \frac{\Delta S}{\Delta DI}$$

Remember, any additional income is either saved or consumed. Therefore it follows that:

$$MPS + MPC = 1$$

Here's the deal, income and expenditure are dynamic and continuous. In the case of a tax cut, the increased expenditure creates a chain effect of subsequent incomes and expenditures through a multiple of producers and consumers.

This is what I mean. Any additional disposable income spent as a consequence of a tax cut, for example, money spent buying an extra pair of shoes or an extra pound of meat, translates to additional income for the subsequent producer. This sequence repeats to create a much larger ripple effect on aggregate demand and is referred to as the [spending multiplier](#). Thus, the government can influence aggregate demand by giving tax breaks or imposing more taxes.

$$\text{Multiplier Effect} = \frac{\Delta AD}{\Delta C, I, G \text{ or } X_n} \text{ or } \frac{\text{Change in Aggregate Demand}}{\text{Change in Spending}}$$

Taxes Cont.

As mentioned above, when the government reduces taxes, people have more disposable income. The portion of the 'additional' income that is spent replicates itself in the larger economy. To find out how many times the spent income will be multiplied we use the [spending multiplier](#), which is expressed by the equation below.

$$\textit{Spending Multiplier} = \frac{1}{MPS}$$

What Happens when the Government Raises Taxes?

Essentially, when the government increases taxes, it effectively removes money from circulation in the economy. Thus the reverse of the spending [multiplier effect](#) occurs. It is also known as the tax multiplier and is expressed by the equation below.

$$\textit{Tax Multiplier} = \frac{-MPC}{1-MPC} \textit{ or } \frac{-MPC}{MPS}$$

It is important to note that government spending creates a larger spending multiplier than a tax break would. This is because, with tax breaks, not all the money is spent, part of it is saved.

We have gone through an AP Macroeconomics review of taxes and how to calculate the spending and tax multipliers. Let us see how you can better prepare for the AP Macroeconomics test.

To prepare yourself, make sure that you familiarize yourself with AP level material. One method to do this is by attempting previous questions and checking how you perform. The multiple-choice questions will test your memory, speed, and knowledge of concepts. Free response questions will, on the other hand, test your ability to apply economic theory to different scenarios.

Taxes Cont.

Let's take a look at the below FRQ extracted from the 2014 AP Macroeconomics exam.

Assume that the United States economy is operating at a level lower than the full-employment level of real GDP with a balanced budget.

If the government increases spending by \$100 billion and finances this through borrowing and the MPC is 75%, calculate the maximum possible change in real GDP that could result from the hike in spending.

Answer

$$\text{Maximum Change in Real GDP} = 100 \text{ Billion} \times \frac{1}{1-MPC} = 400 \text{ Billion}$$

Now assume that instead of financing the \$100 billion rise in government spending using borrowed funds, the United States government increases taxes by \$100 billion to fund the additional expenditure. Will the real GDP increase, contract, or remain the same? Explain.

Answer

Real GDP will increase (1 mark)

The expansionary effect of the increase in government spending is greater than the contractionary effect of the increase in taxes of the same size. (1 mark).

You may also explain part 2 of the above answer by showing the calculations of the net increase in GDP, \$ 100 Billion

$$\text{Spending Multiplier} = \frac{1}{1-0.25}$$

Taxes Cont.

The increased government expenditure by \$ 100 billion will result in increased aggregate demand by \$ 400 billion. This is greater than the contractionary effect due to the tax multiplier which is smaller than the [spending multiplier](#).

$$\text{Tax Multiplier} = -3 \text{ i.e. } \frac{-0.75}{0.25} = \frac{-MPC}{MPS}$$

Thus a contraction of \$ 300 billion would result.

From the above question and its answers, it is clear that a good grasp of both the concept of taxes in macroeconomics and the calculations involved is essential in your preparation for the AP Macroeconomics examination.

To conclude on the subject of taxes in AP macroeconomics, remember that they form part of the government's economic policy and an important avenue for the government to raise funds. There are different types of taxes, which can either be progressive, regressive or proportional/flat. Through taxes, the government can reduce inequalities and redistribute income.

The government also employs taxes to influence economic growth by manipulating aggregate demand. An increase in taxes would amount to a contractionary effect on the real GDP while a decrease in taxes or tax breaks give expansionary effects in aggregate demand.

Keep in mind that taxes are frequently examined in the AP econ and AP Macro exams, and the questions often focus on how well you understand the concept and if you can apply it in real life or hypothetical scenario.



Ready to Score Higher?

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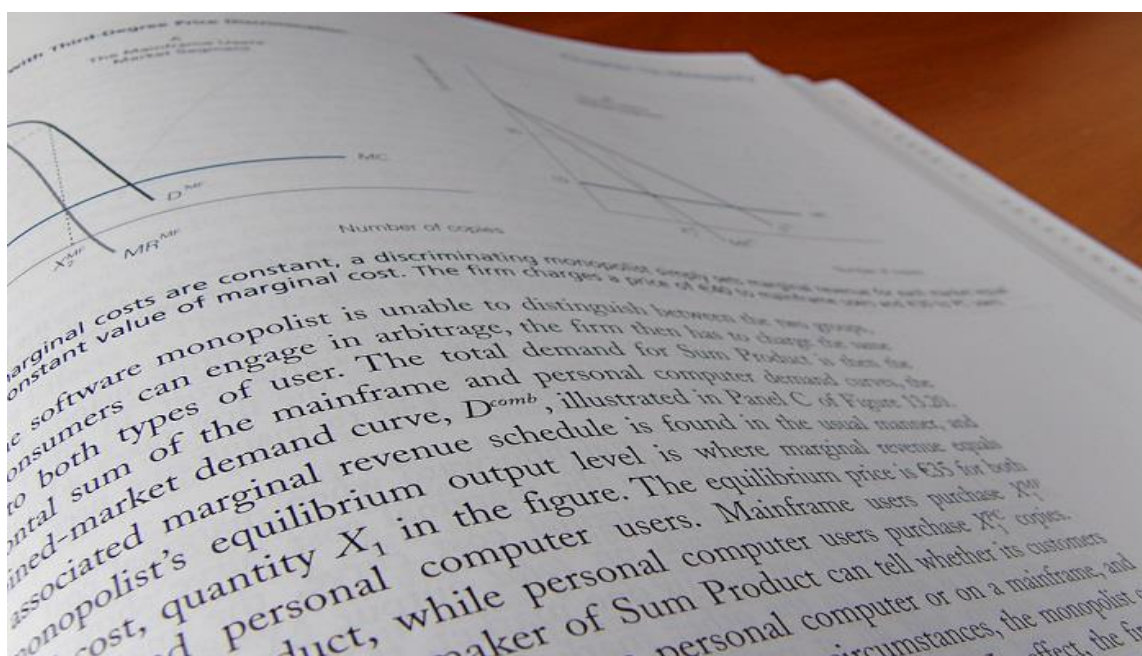
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[Start Practicing](#)

10 Must-Know Basic Economic Concepts for AP Economics



[Image Source: Flickr](#)

Have you ever liked a person who you see in the neighborhood or at school but frankly know nothing about? Your friends probably told you that the best way to get a date with your “crush” was to begin by understanding their basics. After that, you could meet and hopefully you’d get a date.

The same holds for AP Economics. You may consider yourself clueless or have only been hearing about it. But, with a good foundation of the basic economic concepts, you can excel in the course. Here’s the deal: if you read through this article, you won’t have to be nervous about your upcoming date with AP Microeconomics multiple-choice questions and AP Microeconomics FRQs.

10 Must-Know Basic Economic Concepts for AP Economics Cont.

This article is a comprehensive AP Microeconomics review defining the ten most important basic economic concepts. It offers examples so that you can easily recall.

Let's start off with the first basic economics concept.

Scarcity and Choice

Economics is described as the science of choice, centered on the principle that society has unlimited wants but depends on scarce resources. Therefore, decisions are made to maximize satisfaction. For example, many people would like to own a Ferrari, but most settle for cars which they can afford.

Every society must answer the following questions in regards to the dispensation of scarce resources:

- What commodities to produce?
- How should these goods be produced?
- For whom should they provide products?

Economists assume that these choices are made rationally and in self-interest. Scarcity causes people and firms to pick suitable alternatives at the cost of the less preferred options creating opportunity costs and trade-offs.

Trade-offs and Opportunity Cost

As mentioned earlier, economic decisions involve trade-offs between one product and another or using scarce resources in one way or another. When we make an economic decision, the next best but forgone alternative is known as the opportunity cost. For example, if you invest in stocks at the expense of bonds, the interest that bonds earn would be your opportunity cost of investing in stocks.

10 Must-Know Basic Economic Concepts for AP Economics Cont.

Economic choices affect production and influence the society's economic activities. To understand how the opportunity costs are used to optimize output, production possibility graphs are used. Let's have a look at this as a basic economic concept.

Production Possibility Graphs

One of the most important basic economic concepts and chart in AP Economics is the production possibility graph. It is a model that demonstrates alternative combinations of output that an economy can produce. The model is based on the concept of opportunity cost, trade-offs, and scarcity.

When drafting the model, it is assumed that: the economy produces only two goods, there are no changes in the factors of production and the technology level, and capital intensity remains constant (*ceteris paribus*).

Here's an example of this basic economic concept.

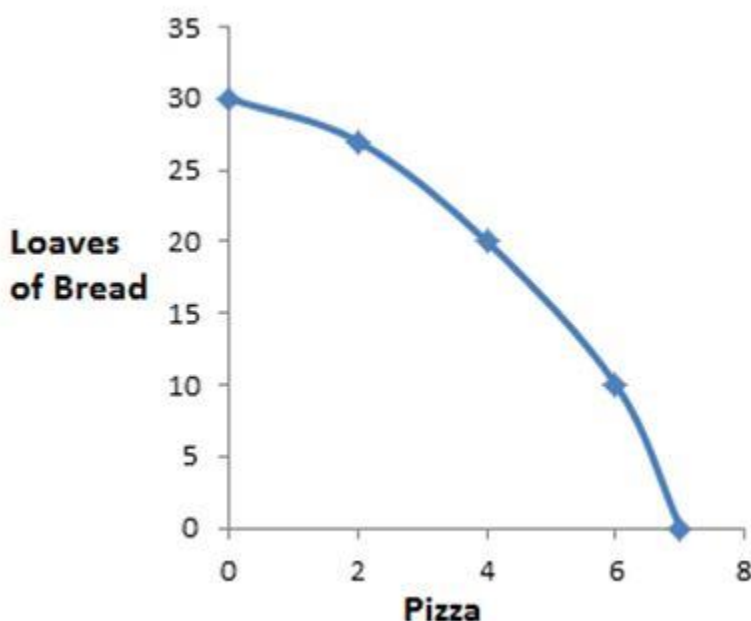
A local bakery in a small town can make either pizza or bread using its single oven and can only operate during the daytime. Below are the bakery's production possibilities per hour of operation:

Pizza	0	2	4	6	7
Loaves of Bread	30	27	20	10	0

When we chart the possibilities, we see that production of pizza is inversely related to the manufacture of bread.

10 Must-Know Basic Economic Concepts for AP Economics Cont.

If the resources are readily adaptable to the different products (equipment, skill of the laborers, availability, and cost of ingredients), the curve formed will be a straight line, although this is not common.



The most typical scenario is when resources cannot quickly adapt to changes, creating a concave curve. This is attributed to the law of increasing opportunity costs which states that as you increase production, the opportunity cost increases.

Changes in the factors of production such as capital, labor or technology cause production possibilities curves to shift. In the above example, if the bakery gets another oven (capital intensity) or a more efficient model (technology) the curve will move to the right.

The production possibilities curve depicts the opportunity costs and trade-offs of how an economy utilizes the factors of production. Let's see more on the concept of factors of production.

10 Must-Know Basic Economic Concepts for AP Economics Cont.

Factors of Production

There are four main factors of production in any economy. These are:

- Land: Comprise of all exploitable resources found on earth such as crude oil.
- Capital: These are the physical apparatuses and equipment employed in the process of production.
- Labor: These are the people who work or the human skills applied to facilitate production.
- Entrepreneurs: These are the people who identify new opportunities or mobilize resources for business or bring products to markets to meet the needs of society

An economy is said to be in full production when resources are used efficiently, at the lowest possible cost (productive efficiency) to address the particular needs of the society (allocative efficiency). Trade-offs are made to maximize the productive and allocative efficiency by the concept of marginal analysis of each choice. Below is more on what is marginal analysis.

Marginal Analysis

This basic economic concept assumes that the additional benefit of a commodity diminishes with every extra unit consumed.

For example, suppose it's at the height of summer and you've been out all day. If you take a bottle of soda, the first one will give you the maximum benefit. However, a third, fourth or fifth bottle will not give you as much satisfaction as the first one did. Although you probably got some benefit from the fourth soda, the extra value diminishes with every additional unit consumed.

This concept also applies to economic decisions and influences production and consumption patterns in a free market system.

10 Must-Know Basic Economic Concepts for AP Economics Cont.

Economic Systems

Producer and consumer choices are the core determinants of market systems. However, they are not the only determinants. The government can also influence these choices and affect the a country's economic system.

When the government acts as an impartial referee in what is also known as Laissez Faire, the system is also referred to as a free market or a capitalist economy. On the other hand, if the government reserves the right to ownership of all resources and regulates what is produced, how much is produced and for whom? The economic system is known as a controlled market or centrally planned economy. A mix of the two extremes is called a mixed market system.

Economists believe that free markets offer the most efficient way to organize economic activity. One of the analogies used to explain the allocation of resources in a free market system is the concept of supply and demand. Here's more on this.

Supply, Demand and Market Equilibrium

Markets are points of interaction between buyers (demanders) and sellers (suppliers) for the purpose of exchange of commodities for value. One of the key points of interaction between sellers and buyers is the price. Supply describes the quantity of a product that will be provided at specific prices. Demand, on the other hand, describes the amounts that the buyers will purchase at specific prices.

Demand and price have an inverse relationship, while supply is directly proportionate to price. Thus a demand curve is downward sloping, and a supply curve is upward sloping. The intersection of a demand and a supply curve is known as the market equilibrium. At this point, the economy experiences full production and full employment.

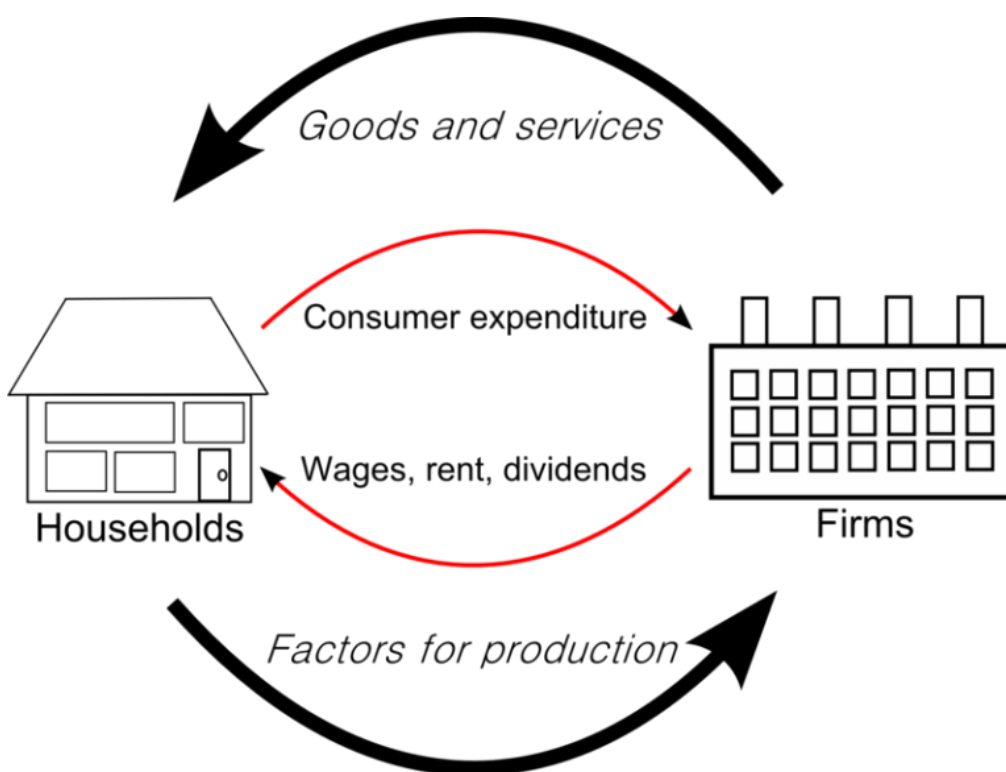
A circular flow model explains the relationships in an economy more elaborately. It is described in the next section.

10 Must-Know Basic Economic Concepts for AP Economics Cont.

Circular Flow Model

This is a basic economic concept where the economy is taken as comprising of two groups, the households, and the firms. The two groups interact in two markets, the commodities market and the labor markets.

In a commodities market, the firms sell produce to the people and receive payments, while in the labor markets, the households sell workforce to the businesses and receive salaries and wages.



The Circular Flow Model. [Image Source: Wikimedia Commons](#)

In reality, however, these relationships are more complex and involve many different types of labor and commodity markets. The circular flow chart simplifies these relationships and makes it easier to comprehend.

10 Must-Know Basic Economic Concepts for AP Economics Cont.

Property Rights and Incentives

The government exercises market power through incentives thereby influencing production. For instance, governments can offer tax breaks and transfer payments to encourage labor supply to low paying jobs.

Property rights, on the other hand, are used to govern the exploitation and subsequent production such as rights of fishing. They are issued with time frames that enable sustainable extraction of the resources and ensure the entrepreneur receives an incentive to supply a commodity.

The government can also give producers incentives such as tax breaks or fees waivers to encourage production of certain goods.

Decisions to promote a particular line of production are usually made to optimize an economy's trading position internationally by maximizing on the most efficiently produced commodities. Here's a look at international trade as a basic economic concept.

International Trade

Different countries exchange various products to meet the demands within their borders. A state will seek to purchase (import) products which it least efficiently produces and focus on providing, and hopefully export, commodities that it can cheaply produce.

When two countries trade, one country can have a comparative or an absolute advantage over the other. The concept of opportunity cost and production possibility graphs is used to establish this. Both countries can use this principle to identify the circumstances which mutually beneficial trade can occur.

10 Must-Know Basic Economic Concepts for AP Economics Cont.

Comparative advantage is established by evaluating the differences in opportunity costs between two countries. For example, if we have wheat and sugar on the production possibility curves of the U.S. and Brazil, and the U.S. needs 2 tons of sugar to make a ton of wheat while Brazil needs 1.5 tons. Brazil has a comparative advantage over the U.S. in the production of sugar.

Let's wind up on this informative AP Microeconomics study guide. Remember, economic concepts are broadly similar in both micro and macroeconomics. This article highlighted the ten most important basic economic concepts for your AP Economics review, and if you've read all of this, you'll have a good time with your date.

6 Ways to Score Big on the AP Macroeconomics Multiple Choice

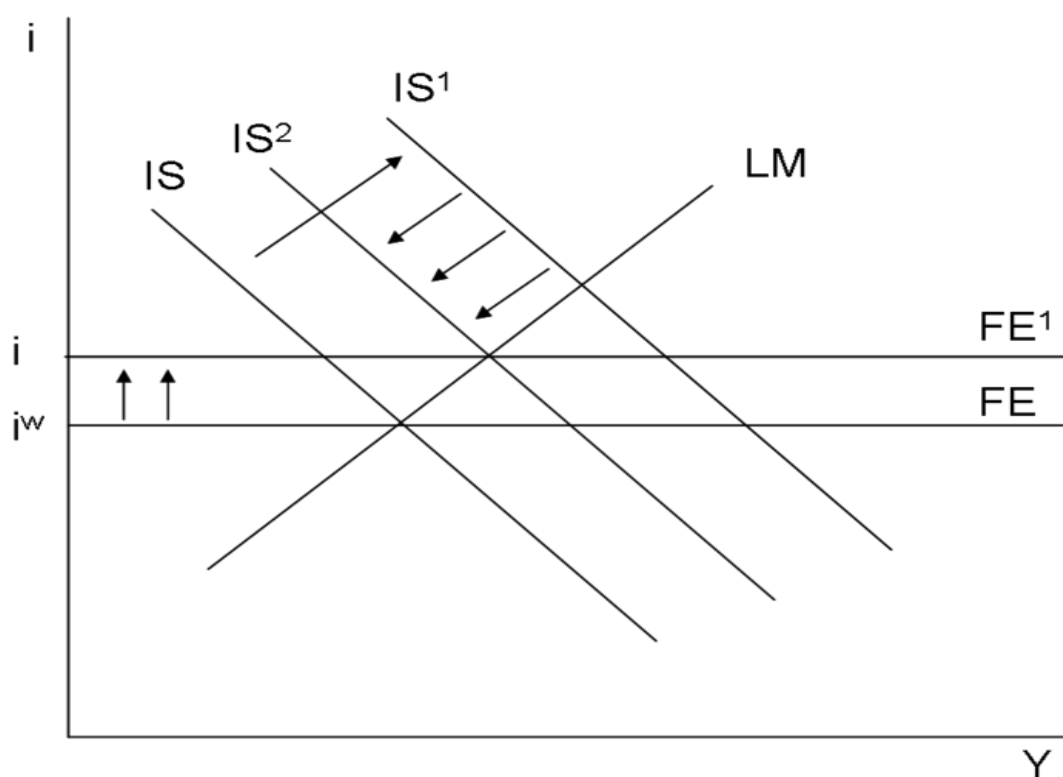


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The AP Macroeconomics exam is split into multiple choice questions and free response questions. So, in order to score big on your AP Macro exam, you've got to score big on the AP Macroeconomics multiple choice. This post is designed to help you do just that! In this post, you'll find 6 helpful tips for your AP Macroeconomics review. When you're done, be sure to check out the other half of scoring big on your AP Macro exam – our post on actionable strategies for the [AP Macro free response questions](#).

6 Ways to Score Big on the AP Macroeconomics Multiple Choice Cont.

1. No way around it – study, study, study

You probably don't want to hear it, and while it would be nice to believe there's a way to score big on the AP Macroeconomics multiple choice without some studying, we all know that isn't the case! Simply put, there's a lot of concepts that you'll need to know to do well on your AP Macro exam, and the only way to get there is to study! Aside from the basics, major topics that you'll need to know include international trade, money and banking, and macroeconomics stabilization. For some people, building a [study guide](#) can be helpful, for others flash cards are important. Some people learn best when they're underlining and highlighting, while others need to slow studying down a bit and take some notes at the same time. This, however, isn't a post on studying practices. Only you know what works best for you while you study. However, we should still start here, because at the end of the day if you want to score big on the AP Macroeconomics multiple choice you've got to be prepared to put in the work studying!

2. Get a review book

To get the most out of your AP Macroeconomics review, you're going to want to make sure you're supplementing it with all the material that you can. One important piece of supplemental material that you'll want is one of the many possible AP Macro review books. How do you know which AP Econ study book to choose? Luckily, there are a couple of AP Econ books out there that are highly recommended. Each year, the Princeton Review puts out an AP Econ book called *Cracking the AP Economics Macro and Micro Exams*. Likewise, each year Barron's also puts out their *AP Microeconomics/Macroeconomics* review booklet. Both of these are highly recommended books, with Barron's being particularly useful if you need a book that goes more into detail. While these books are obviously useful for studying, they also help you frame what you need to study. They'll hit on the key points that you'll need to know for the AP Macroeconomics multiple choice. This will help you make sure that you aren't wasting any study time and are studying exactly what you'll need to know for the AP Macro exam. Each book also comes with some extra practice materials, and as you'll see soon, those extra materials are going to be very important!

6 Ways to Score Big on the AP Macroeconomics Multiple Choice Cont.

3. Most important, practice as much as you can

This is the big one. Other than the obvious need for studying, the most important way you can prepare to score big on the AP Macroeconomics multiple choice is to practice! Taking practice AP Macroeconomics multiple choice tests is important for a number of reasons. First, as we'll see below, timing is going to be important, and there's no way to work on your timing unless you're actively taking AP Macro multiple choice practice exams. Taking many practice exams will also give you a feel for the types of questions that are going to be asked. This can help you refine your studying so that you focus on what's most important. Finally, even when you get the questions wrong on a practice exam, it's still a great opportunity to learn! When you get an answer wrong on a practice test, you should try to figure out exactly *why* you got the answer wrong. This will help you retain the concept that confused you. Good sources for questions include review books, old AP exams, and the [Albert.io Macroeconomics section](#).

4. Focus on your timing

A big part of the help that comes from practicing as much as you can is that you get a sense of your own timing. While you're taking the test, you're only going to have a set amount of time to finish the multiple choice questions. This means you've got some trade-offs that you need to take seriously. Practicing ahead of time lets you think about how you want to handle these trade-offs.

As you work on your AP Macroeconomics multiple choice questions, you'll want to make sure you are reading everything carefully. You'll want to make sure that you're considering all the available options. Sometimes, a question will be hard, and you'll want to skip ahead and go back and revisit it. With some questions, you'll have to work out how it would change a graph since AP Econ is filled with them. However, even with all you'll have to do, you've still only got 70 minutes to do it in. This means before the exam, you've got to focus on your timing. Here, we'll explain some ways to do just that.

6 Ways to Score Big on the AP Macroeconomics Multiple Choice Cont.

First, time yourself while taking a practice exam. Don't worry initially about how long it takes you to finish, just see where your baseline is. Once you've done this, if you're finishing consistently over time, take a step back and try to figure out what's tripping you up. Do you spend too long on questions you don't at first know the answer to? Try skipping them and coming back to them. That way, you know that you've given yourself time to answer the ones you know, and you can spend your remaining time thinking about the few that you were stuck on. Finally, it's useful to practice finishing within the time limit. If you're still over time, evaluate what specifically is holding you up, and build some strategies to make sure that you're finishing within the right amount of time.

5. Never forget to guess

Since 2011, AP exams no longer take off points for incorrect guesses. This means that there is absolutely *no* downside to guessing! So no matter what, always make sure you put down something! However, you can even do a bit better than that. Most of the time, you'll know enough about the subject to put down an educated guess. You can probably eliminate one or two of the answers on your AP Macroeconomics multiple choice exam questions. As you'll see below, one effective strategy for ruling out answers is to make changes to graphs you know and see how, for instance prices adjust. Once you've done this, you've already increased the odds that you get the right answer substantially. Then, since they won't count anything against you, choose which of the remaining answers you think is most likely to be right and mark it down. Most of all, remember, even if you can't eliminate any of the possible answers, take your best guess. They won't mark it against you, and you never know, you might just be right!

6. Know your graphs!

Our last bit of advice for scoring big on the AP Macroeconomics multiple choice is to know your graphs! In economics, this is a big one. You'll be asked to interpret many graphs in the AP Macroeconomics multiple choice questions. Further, for a lot of the questions, you'll end up drawing a graph just to understand what they're asking for.

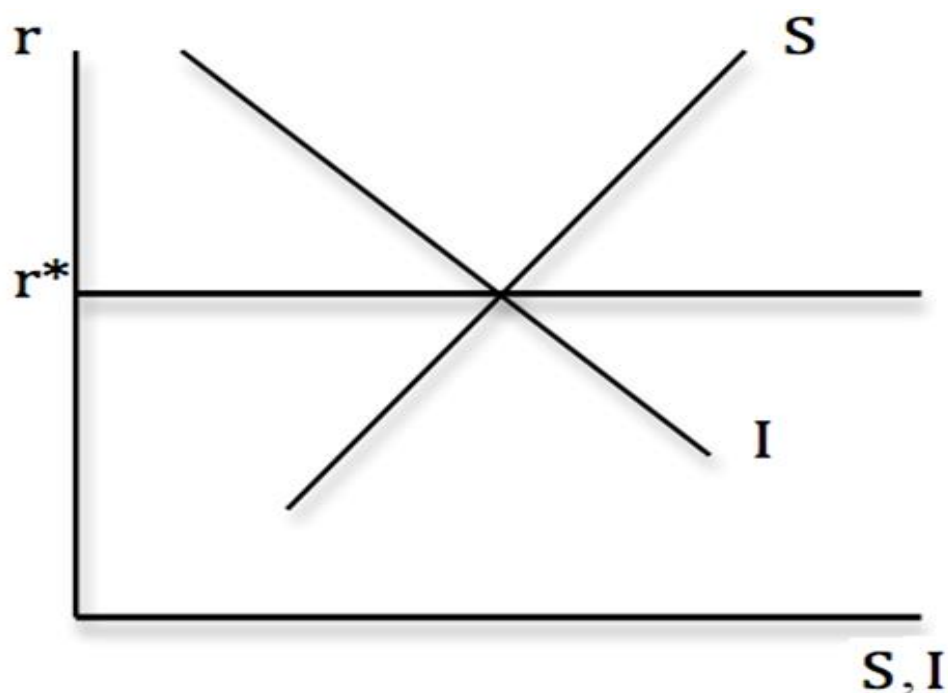
6 Ways to Score Big on the AP Macroeconomics Multiple Choice Cont.

More than simply drawing and interpreting them, though, you'll also need to understand how changes affect the graphs. Say, supply in the loanable funds market increases, you'll need to know how to draw that on your graph and what the implications are for the question you've been asked. Other graphs to know include the Productions Possibilities Curve, aggregate supply and demand, and tariffs.

Conclusion

In this post, we've given you some tips for scoring big on the AP Macroeconomics multiple choice questions. First and foremost, you've got to be willing to put in the time, studying is always key. Second, you should be on the lookout for a great review book. Depending on how much detail you'd like the review book to go into, both the Princeton Review and Barron's make for great options. Third, and perhaps most important, you should practice as many AP Macroeconomics multiple choice exams as you can. This will help you fine-tune not just your multiple choice taking abilities, but also your studying, as you get a feel for the key concepts and the concepts where you need to put in some extra work. It's also important for the fourth tip, which is focusing on your timing. Finally, you've got to know your graphs and you should never forget to guess! After finishing this, you should go check out our tips on the [AP Macroeconomics free response questions](#). Be sure to leave us comments. Are there any other tips that you found particularly helpful while studying for the AP Macro exams?

7 Actionable Strategies for Tackling AP Macroeconomics Free Response



[Image Source: Wikimedia Commons](#)

While you work on your AP Macroeconomics review, you'll want to pay some special attention to how you'll deal with the AP Macroeconomics free response questions. Along with the [AP Macroeconomics multiple choice questions](#), which you can find ways to score big, the AP Macroeconomics free response is another major part of the AP Macro exam. In this post, you'll find strategies for tackling the AP Macroeconomics free response questions.

7 Actionable Strategies for Tackling AP Macroeconomics Free Response Cont.

1. Most important, do as much practice as you can.

By far the most important strategy for preparing to tackle the AP Macroeconomics free response section is to practice as much as you can! Taking practice exams will help you pin down the types of questions you can expect to see, and exactly what types of answers you're expected to supply. Checking your answers afterward can be particularly useful, as you'll get an idea of what is being looked for in a good free response answer. It will also help you with timing, and making sure that you know to label graphs – two strategies that we'll touch on later on in this post. All told, practice exams will be far and away the best strategy available to you as you prepare for the AP Macroeconomics free response section. You can find practice questions in the review books that we'll mention a little later or in [Albert.io's Free Response section](#). However, for the AP Macroeconomics, free response there's also an official CollegeBoard option! If you search on collegeboard, you can actually find both the questions and answers to all the previous AP Macroeconomics free response sections. This gives you an enormous supply of free response sections to work from and refine your test-taking abilities with!

2. Make sure you've got the graphs down, and don't forget to label!

As you go through your AP Macroeconomics review, you'll find that graphs are incredibly important. Most of the key concepts in AP Econ will be attached in some way to a graph. So it should come as no surprise that the AP Macroeconomics free response questions usually involve them! The first thing you'll want to do is make sure that you've mastered the graphs associated with all the main concepts of AP Macro. Be prepared not just to understand and interpret them, but also to make changes to them and use them to explain the concepts. For some of the AP Macroeconomics free response questions, you'll be asked to show and use graphs like this. When you do so, be sure to label everything! Under labeling is one of the most common mistakes made on the AP Macroeconomics free response. So when in doubt, label!

7 Actionable Strategies for Tackling AP Macroeconomics Free Response Cont.

However, because graphs are such an integral part of AP Macro, you'll find that they're useful for your AP Macroeconomics free response even when they aren't explicitly asked for. They can help you when you are asked to explain a concept, and they can also help you on your scratch paper as you try to tease out what the right answer is. So you've got to make sure you know your graphs! Some particularly important graphs are the loanable funds market, the Production Possibilities Curve, and [aggregate supply and demand](#).

3. Time yourself.

You'll only have an hour (including reading time, which we'll focus on in a later strategy) to get through the three questions you need to answer in the AP Macroeconomics free response section. This means that timing is going to be important. You can't allow yourself to get hung-up trying to answer or perfect your answer to one question for too long, or else you won't have time to give well-reasoned responses to the remaining questions. For instance, make sure that the logic of your answer makes sense and that you've labeled, but don't worry about grammar. Check for keywords to know what your answer should look like: show, identify, calculate, explain. A strategy for preparing for this is to time yourself while you take practice AP Macroeconomics free response questions. First, see how long it takes you to tackle one free response section from a practice exam. You'll have 60 minutes total for free response questions, where 10 minutes of that is for reading and planning. In the 50 minutes, you'll have one long question and two short questions you need to finish. Then, if you took too long, try to take a step back and evaluate where you got stuck. Did you spend too long trying to perfect one answer? Did you spend too long on one question where you never came up with an answer? Did you flip between a couple possible answers for too long? Once you know what took so much time, try another set of questions and try to work on your mistakes. Once you feel yourself getting a rhythm, be sure to time yourself taking one set of questions, replicating the feeling of the exam itself.

7 Actionable Strategies for Tackling AP Macroeconomics Free Response Cont.

4. Get yourself a review book.

Review books can be amazingly helpful in preparing for the AP Macro exam, and in particular the AP Macroeconomics free response section. Review books will give you an overview of the key concepts that you need to know for your AP Econ studies. They also tend to have additional tips relevant to the free response questions. Finally, they're a great source of additional practice exams, and as we've seen practicing AP Macroeconomics free response questions is one of the best strategies available to you. Barron's puts out their *AP Microeconomics/Macroeconomics* review book every year, and it is highly recommended. It's a particularly good book if you need a review book that will dig deep into the details of AP Macroeconomics. If you don't think you need such detail, but still want some the help and practice questions, another recommended book is the Princeton Reviews annual *Cracking the AP Economics Macro and Micro Exams*.

5. Use flash cards for the key concepts.

Flash cards are a great strategy for preparing to tackle the AP Macroeconomics free response. One reason for this is the relevance of formulas. To answer some of the questions, you're going to need to be sure that you've reviewed, understand, and can apply many of the formulas you'll come across in your studies. This is where flash cards can make a big difference. However, this is not the only reason. There are also simply a lot of concepts, terms, and definitions that will be important to understand. Flash cards are always useful for getting your definitions and basic concepts down. Some other macroeconomics concepts that lend themselves well to flash cards are national income accounts, economic growth, and financial markets. Flash cards will help you make sure that you've memorized what you need to know for the exam.

7 Actionable Strategies for Tackling AP Macroeconomics Free Response Cont.

6. Always put down something, and remain consistent!

Most of our previous strategies focused on preparing for the exam, but with these last two strategies we'd like to give you some helpful tips on approaching the exam while you're actually taking it.

First, for each part of the free response questions that you come across, be sure to at least put something down! While it's probably not as easy to luck into getting the right answer like it is with the multiple choice section, the free response section has something multiple choice doesn't – partial credit. So put down the best answer that you can, and you may have gotten close enough to get some partial credit! Just be sure to never leave anything blank!

Now, let's say you have some trouble on the second part of a free response question, but you've still got a few parts to go, how do you handle this? The best thing you can do is to *remain consistent*. Even if you got a wrong answer earlier, if you've remained consistent and gotten the logic right on the next part, you'll still receive credit! So don't worry if you have trouble with an early part, just stay consistent and you can still get all the available points further into that question.

7. Use the reading time wisely.

Finally, let's talk about those 10 minutes of reading time that they give you at the beginning of the AP Macroeconomics free response question. You'll wish that you could start writing immediately, but instead use those 10 minutes wisely. Be sure to take this time to read all of the questions, and make sure that you understand what is going on in each question that they ask you. Then, take this time to start connecting your thoughts together. Plan to tackle the easy questions first, to make sure you get those points out of the way. Be sure to think about the relevant graphs you'll need for the questions. This will help you make sure that you're giving a full, clear, and concise answer to each of the questions.

7 Actionable Strategies for Tackling AP Macroeconomics Free Response Cont.

Conclusion

This post gave you some actionable strategies to use both before and during the AP Macro exam to help you tackle the AP Macroeconomics free response section. First and foremost, you've got to practice, and this strategy will help you work on some other strategies we touched on including working on your timing and making sure that you have a firm handle on all the graphs that are integral to AP Econ. To practice, you can use the questions available in some great AP Econ review books that you should pick up, or you can simply go to [Collegeboard](#) and use previous years' exams. To ensure you have the key formulas and concepts down, try utilizing flash cards in your studying. Finally, once you are actually taking the test, you'll need some more strategies. Always be sure that you label everything on your graphs. You don't want to lose a couple points simply because you forgot to label an axis! Be sure to use the 10 minutes of reading at the beginning to collect your thoughts, and always remember to put at least *something* down! Do you know of any other useful strategies for the AP Macroeconomics free response section? Let us know in the comments!

How to Study for AP Macroeconomics



[Image Source: Wikimedia Commons](#)

The AP Macroeconomics test can seem mind-numbing and challenging if you are new to economics. Looking at the course from the outside, it seems like you will be bombarded with endless theories and graphs that contain unrecognizable terminologies and symbols. The truth is, macroeconomics, and economics in general, is a lot easier than what it looks like at a glance.

The study of economics can be put in short as the study of people and their behavior. Macroeconomics sets that study into a bigger picture. It works to predict or explain why people specialize in a certain field of production or why a government has chosen to pursue a certain policy.

How to Study for AP Macroeconomics Cont.

So once you've decided to take the exam, you should keep these concepts in mind. The theories and graphs are a lot easier to make out if you associate them with real world situations. For example, opportunity cost may seem like an abstract term, but it is easier than you think. It is the loss of any alternative to a specific choice. For a real world example, your decision to study for the AP Macroeconomics test has an opportunity cost of the time you could have spent doing other things.

AP Macroeconomics study guides will have a wealth of real-world examples and applications of various concepts within the field. You can use these resources to help you work towards your goal of getting a 5 on the macroeconomics test. Below you will find some AP macroeconomics study tips to help you achieve that goal.

What's on the Exam?

Before getting started studying for the exam, your first step would be to figure out the contents of the exam to determine the distribution of the topics you should study. The key to your AP macroeconomics study plan is prioritizing what will be important throughout and what information might only show up on one or two questions.

The [College Board's](#) overview of the exam has separated the themes of the AP macro exam into four overarching sections that are each separated into smaller concepts. These sections are given a certain percentage of coursework, and thus the exam content itself is based on these percentages. The breakdown of the exam is as follows:

1. Basic Economic Concepts (8-14%)

This percentage is misleading. Based on the overall breakdown it would seem like this section should have the least amount of time when creating a study plan, but it's the bedrock of the entire course.

How to Study for AP Macroeconomics Cont.

While you won't be spending hours looking it over, you will have to refer to coursework and information from this section throughout your studies. It would be good to keep this information close while you study. The following is the content of this section:

A. Scarcity, choice, and opportunity cost

- Note: These are the core of economics. While not exactly significant to the exam itself, they are important to understanding how economics work.

B. The PPC (Production Possibilities Curve)

- The first of many graphs you will have to understand. This graph is the basis of all other graphs.

C. Comparative advantage, absolute advantage, specialization, and trade

- An extremely important concept on how a country decides to produce goods and trade. This will most likely appear on the exam in some form, using a PPC to demonstrate how it works.

D. Economic systems

- Free market, mixed and command economies

E. Property rights and the role of incentives

- This is the introduction of the factors in economics. Land is the first and probably the most important factor of production.

F. Marginal analysis

- In short, the benefits yielded from continuing a specific activity versus the cost of continuing production. This concept has more to do with microeconomics.

How to Study for AP Macroeconomics Cont.

2. The Nature and Functions of Product Markets (55-70%)

As implied by the dedicated percentage, this is the most extensive part of the course. It consists of the most important theories and concepts of economics. You will graph extensively, which will more than likely be used on the AP Macroeconomics exam itself.

A. Supply and demand (15-20%)

- One of the cores of economics itself. This will appear on the exam, and you will have to read a graph or create a graph yourself in an open-ended question.

B. Theory of consumer choice (5-10%)

- This is an expansion of marginal analysis and choice from the basic concepts. Its focus on smaller individual choices is more related to microeconomics.

C. Production and costs (10-15%)

- This deals with temporal shifts in production on long-run and short-run curves. This will more than likely appear on the exam in which you will have to explain the shift in curves.

D. Firm Behavior and market structure (25-35%)

- This is a huge chunk of the exam – and for good reason. It is formed and explains the concepts of profit and competition as well as the situations that give rise to monopolies and oligopolies. It's very important to study this part of the exam as it contains major concepts of how economics works.

How to Study for AP Macroeconomics Cont.

3. Factor markets (10-18%)

This section is fundamental to understanding how trade works and the fundamentals of economics today. It deals with the three main factors of production (labor, rent, and capital) and how they work in economics.

4. Market failure and the role of government (12-18%)

This section takes all you have learned about economics and applies it to real life situations. The role of government is especially important in understanding the Federal Reserve's role in the economy. Most past free response questions have at least one question that has to do with this area.

What does the Exam Look Like?

The structure of the exam is the first thing you should look at when fleshing out your study plan. The percentages that were shown previously will be your primary guide to what topics you should look at and which ones might be less important. The AP itself is split into two sections. These are:

Section	Time Allotted	Percent of Final Score
Multiple Choice	70 minutes	66% or two-thirds
Free-Response	60 minutes	33% or one-third

The previously mentioned concept percentages represent the percent of questions that will make up the multiple-choice section of the exam. The multiple choice section is made up of 60 questions. You will have a little over a minute to answer each question.

How to Study for AP Macroeconomics Cont.

The following is a breakdown of how many questions will be directed to the different concepts in this section.

Concept	Questions
Basic Economic Concepts	5-8 (8-14%)
Supply and Demand	9-12 (15-20%)
Theory of Consumer Choice	3-6 (5-10%)
Production and Costs	6-9 (10-15%)
Firm Behavior and Market Structure	15-21 (25-35%)
Factor Markets	6-11 (10-18%)
Market Failure and the Role of Government	7-11 (12-18%)

As can be seen, just based on the weighting of the course, the Supply, and Demand as well as Firm Behavior and Market Structure concepts appear to be the most important parts to learn on the exam. However, it should be noted that AP macroeconomics is a course that builds upon itself, meaning all previous and future material will influence how you learn the other concepts. This may prove that you should dedicate more time to learning the larger sections, but it does not mean the smaller sections are less important.

How to Study for AP Macroeconomics Cont.

A much more important reason to consider all concepts in the exam is the free response questions. These questions can relate to nearly every concept of the exam. Many times they are constructed in such a way that you have to pull knowledge from several different concepts to formulate a correct answer. There are only two concrete things to consider for the free response section.

First, you will have to create a graph in the free response section. This is an absolute given. That means that all graph dependent concepts will be important. Even if a question does not specifically ask you for a graph, you will probably have to draw one anyway to formulate your answer.

Second, reviewing the past free response questions, there is almost always a question that has to do with government policies, market structures, and the structure of firms (monopolies, oligopolies, and related concepts). Note that the final two are part of the concept with the heaviest weight.

How do I Study for the Exam?

This is the key question to getting a 5 on your AP Macroeconomics exam. The answer hinges on your school's way of teaching economics. Some schools dedicate a year to economics while others dedicate just half a year and give the other semester to government classes. For those who take a year, you will be looking into creating a study plan that can help you keep your brain refreshed on all concepts. The best part is that you will have a guided tour through the world of macroeconomics to the point that you will have covered most of the College Board's material at the end of the year. The downside is that you have to put in extra studying to remind yourself what you learned 6, 7, or 8 months ago.

The obvious downside to those who only take a semester of economics is that you will be presented with a compacted curriculum to try to get through the topics. This means less coursework, examples, and guidance from a teacher. However, it is not all bad as learning the core of macroeconomics leaves time for you to branch out and study other concepts that were missed in class. All of this means you will have a great way to structure your study topics based on your teacher's rubric.

How to Study for AP Macroeconomics Cont.

The Study Plan

Let's look at an ideal AP macroeconomics study plan to get you started. This plan is set up with the goal of getting a perfect 5 on the exam. You should expect to put in 8 – 12 hours of study in a week. This means putting in about an hour to two hours of study during the school week with the rest spread out over the weekends. Those who only took a semester of macro should spend more time studying while those who are taking a year should spend less time, but cover past concepts as a way to refresh your brain.

After setting up your schedule, you should consider materials. You have your times in, but you don't have to spend it all reading and reviewing. The internet has opened up a vast trove of resources to help you study. As long as your material is economics-oriented and has to do with the topics set up by the College Board, you can do what works for you.

Videos

For those of you looking to refresh topics, you should consider looking through videos on YouTube that can help you remember what you might have forgotten. There are two particularly great YouTube channels that are dedicated towards AP macroeconomics reviews:

- [Crash Course Economics](#): This is a series of 35 videos that average about 10 minutes each. The videos are hosted by two high school Economics teachers who present information in a fun and visual way. This is a great way to supplement your studies by reviewing concepts.

As a side note, there are some videos in the [U.S. government and politics playlist](#) that help explain government economic policies and regulation, namely videos 46, 47, and 48 of the playlist.

- Clifford's Channel: One of the hosts of the Crash Course videos has [his own channel](#) that is much more specific and great if you need a teacher instructing you on specific topics.

How to Study for AP Macroeconomics Cont.

Reading and Review

Aside from the instruction and refresher videos, you should get some reading done. Most of these will offer AP macroeconomics tips on how to study for the exam. The majority of these tips have to do with memorization and strategies that will help you move faster through your exam, but not in a careless way. Of course, some of them provide you with reviews as well.

- [The Albert.io Blog](#): The Albert.io blog offers a wealth of information for studying for the exam. It mostly covers specific topics, giving real world examples for those topics to help you grasp them better. There are also general study guides to help you prepare yourself.
- **Buying a Study Guide**: There are thousands of different brands of AP Macroeconomics study guides to choose from. You should look through each to figure out which one fits your needs. The most important quality of a good study guide is that it offers a comprehensive review of all the content of the AP Macroeconomics course with examples.
- [The College Board's Exam Information](#): This resource is invaluable because it comes straight from the organization that writes the test. Within this resource, you can find previous questions, exam tips, and the course descriptions itself.

Practice, Practice, Practice

Once you have settled yourself down into all the concepts of the exam and its content, then reviewed, you will have to test yourself and practice some questions to see where you are in your studies. The best way to do this is by answering questions relating to macroeconomic. Most of the time you might just jump into an exam and gauge yourself on what final grade you make, but there is a fine-tuned process you can take on to identify your strengths and weaknesses.

How to Study for AP Macroeconomics Cont.

Before taking the exam itself, you should try answering questions on specific topics. Albert.io offers [hundreds of practice questions](#) that you can try to see where you are at. The best part is that these questions are separated into sections. Not only do you get practice to learn from, but you also see what sections the questions come from.

The Albert.io practice questions can help you identify your strengths and weaknesses on specific concepts as set out in the College Board's own resources. It even offers some free response questions to help you structure and execute your answer.

After identifying your weaknesses, you should go back and review the concepts that you have had trouble with. Marking down your strengths and weaknesses will help you structure your review materials to better serve your needs and give yourself a personal lesson. After reviewing your material for an amount of time you have allotted for yourself, it will be time to jump back in and test yourself to see how much you have progressed.

Practice Tests

At this point, you have realized your weak areas, and you've attempted to correct them and work towards a better exam score. You should be brave enough to go forward and take a real practice test to get a feel of what a real exam would look like.

The best suggestion for taking practice tests would be to time yourself as if it were a real exam. This means setting aside an hour or two of your day to take the exam. You should choose an area that is quiet and comfortable so as to simulate a real testing area. Finally, leave electronics and other distracting materials.

For a perfect practice test, you should refer to the [College Board's 2012 Exam](#). This is a real AP Macroeconomics test from 2012. The printout includes a scantron and papers to write on as if it were the real thing. With this practice test, you can simulate a testing environment and time yourself for the separate sections of the exam.

How to Study for AP Macroeconomics Cont.

The 2012 exam also contains the answers to both the free-response and the multiple-choice sections of the exam. For the free-response answers, you can also check your work and score your answer with points based on how the College Board scores results. Finally, the answers are a great resource in themselves because they offer real insight into what a grader will be looking for. After you have reviewed your answer, the exam provides a scoring chart at the end to calculate your final score.

In addition to the 2012 exam, there is also a 1995 exam for you to take. However, the 1995 exam offers less help for gauging what the exam might look like due to its age as some changes have been made to the exam since then. There are also [sample free response answers](#) going all the way back to 2003. Here you can find real student answers and grader comments to help you make yourself prepared for what will be included in the exam.

Strategize

While knowledge probably makes up most of what you score on your exam, you still need to take a step back and realize that this is a timed exam. You don't only have to show what you know; you also have to be able to answer quickly enough to get through the exam. This is where test taking strategy comes in. The strategy does not necessarily apply to the moment you are taking the test, but also all the time leading up to your exam.

Most pre-test strategies have already been covered above. You have to set up a schedule and stick to it so that you can cover all the material necessary to get your 5 on test day. This means setting aside hours each day, or even figuring out if you want to sit down and study for hours on end or study in smaller blocks throughout the day. All of these strategies have to do with what your personal needs are and your capacity to study. The [Study Guides and Strategies](#) website can help you in your test preparation.

How to Study for AP Macroeconomics Cont.

Probably the most important aspect of a test preparation strategy is working in such a way that you minimize stress and anxiety. The main problem with test taking is the stress that mounts in the months and days leading up to the exam. This can drastically interfere with your learning capacity and your ability to study efficiently.

You will also have to make a strategy that you can use on the day of the exam. Remember that you only have a little over a minute per question on the multiple choice exam. The best part of the exam is that you can jump back and forth on the test to answer questions. If you find yourself caught on hard question, immediately skip it and come back to it.

Doing the easiest questions first means you are saving time for the harder questions. For example, if you are taking only 20 seconds to read and answer easy questions, you are stacking up a surplus of 40 seconds per easy question that you can utilize to think about a harder question. This extra time really piles up over the course of the exam.

The free-response questions come with their own strategy. The primary cause of a badly answered free response question is the lack of organization. You have 70 minutes to answer your questions. While most people think that the free response questions take a long time to answer, it does not have to be that way. The best strategy is to plan ahead.

When you first read your question, take a moment to consider it. You can use the provided scrap piece of paper to formulate the answer. Outline the topics as asked in the question and jot down the main point of your answer. After you have an outline, move on to answer the questions in an organized manner. This method of planning will help you save time and offer a coherent answer that will help your grader get a grasp of what you want to say.

The organization extends to graphing as well. You should take time to sketch a graph on an extra piece of paper before actually drawing the graph in your answer. This will ensure your graph is legible to the grader and free of smudges and other marks that might make it harder to read.

How to Study for AP Macroeconomics Cont.

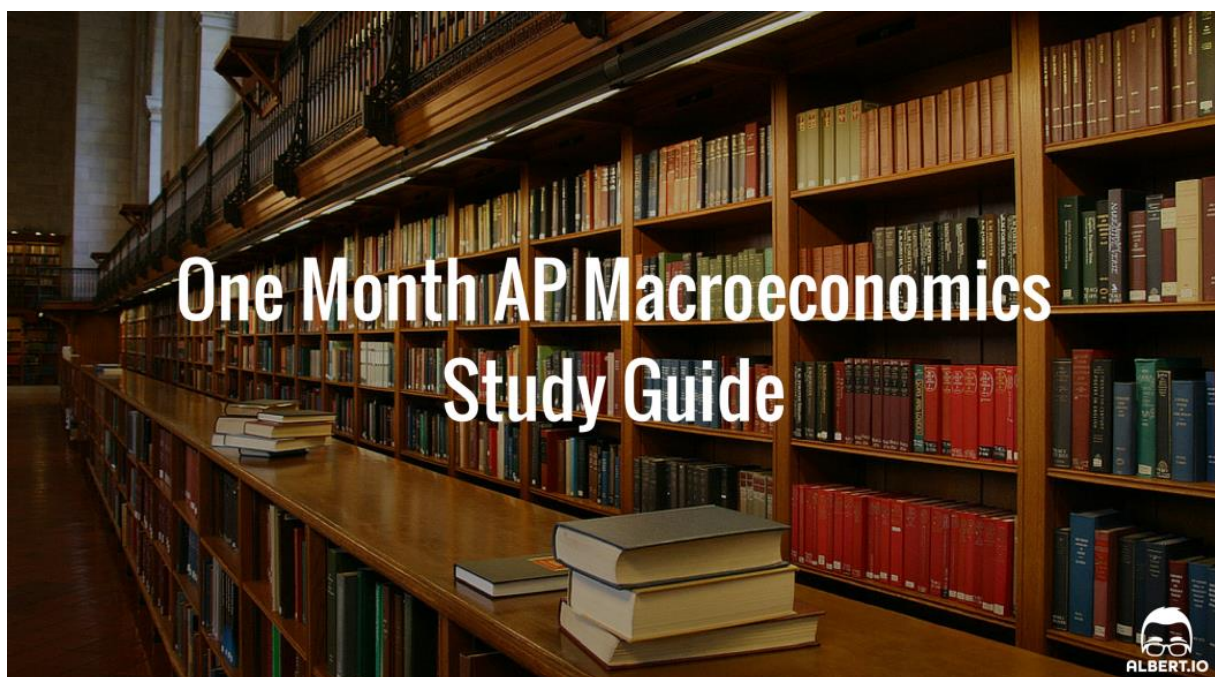
Wrapping it up

AP Macroeconomics seems like a difficult subject to grasp at times. Just looking at the structure of the classes and all the topics you have to cover can be dizzying. The truth is, all of macroeconomics can be summed up into the study of human behavior and how they make use of what resources they possess. The study of economics is what you buy, why you buy it, and how that item was provided for you.

Studying economics will help you grasp how the world works. This is mainly shown in how you interpret government policies. With a background in macroeconomics, you can decide whether or not you think it was the right move for the Federal Reserve to raise or lower the interest rates or if the president's program can really help unemployment.

The AP macroeconomics exam does not have to be a big, formidable beast if you take the time to look at the concepts that the exam covers. Each of the concepts is things that you know or things that can be applied to real life. Using your resources and studying can help you get a grasp on those concepts and understand how macroeconomics really works.

One Month AP Macroeconomics Study Guide



If you're reading this, then you are already aware of how difficult and stressful the AP examination process can be. Whether you're taking one or ten exams this year, you know that studying is going to be your key to success. And the rule of thumb for studying for AP exams is definitely, the more the better—you can never study too hard, especially when it comes to AP Macroeconomics. But where do you start? How do you know what to what concepts to focus on the most? Don't worry, we're here to help you with that.

One Month AP Macroeconomics Study Guide Cont.

This AP study guide is designed to give you everything you need to review, learn, and retain for the AP Macroeconomics Exam. We can't guarantee you a perfect 5 on your exam, but we can give you all of the tools necessary for a successful test day. Follow this daily to-do list and your knowledge of finance and trade will sharpen and let us help you become a Macroeconomics pro at the end of this 1-month study guide!

Key Things to Remember while Using this AP Study Guide

From The CollegeBoard: "The AP Macroeconomics course provides students with a thorough understanding of the principles of economics and how economists use those principles to examine aggregate economic behavior. Students learn how the measures of economic performance, such as gross domestic product (GDP), inflation, and unemployment are constructed and how to apply them to evaluate the macroeconomic conditions of an economy. The course recognizes the global nature of economics and provides ample opportunities to examine the impact of international trade and finance on national economies. Various economic schools of thought are introduced as students consider solutions to economic problems."

The exam itself consists of 60 multiple choice questions, for which you have 70 minutes to complete. This will make up 66 percent of your exam score. There will also be a single long response question and two shorter response questions that will make up the Free Response section of the exam. These three questions must be completed within 60 minutes and account for 33 percent of your overall score.

This is a guide, you don't have to follow every step if it's not working for you. We cannot know every single learning style for all of our readers. But we have created a comprehensive list of daily activities and study guides that will help you along your path to that 5 score. That said, feel free to move these recommendations around as you see fit. If one of our ideas just isn't clicking with you, replace it with a study habit you know works for you. Make this study plan work for you and your individual abilities.

One Month AP Macroeconomics Study Guide Cont.

This may seem like an impossible statement, but make studying fun! Try not to get too stressed out when studying for the exam. Sure, the more, the better, when it comes to AP exam help, but don't stress yourself out either. You will be doing a lot of work over the next 30 days, but stress and freaking out never helped anyone ace a test. Nothing is so important that it should make you miserable, so enjoy and feel pride in each of your accomplishments as we move forward. We're rooting for you too!

On that note, stay healthy! Maintain a healthy eating and sleeping schedule. You can study all you want, but if you don't take care of your body, you will not be doing yourself any favors on test day. A healthy mind remembers things better. Also, if you ever feel yourself getting tired following this study plan, get up and do a couple of quick stretches, or go for a short walk. Your brain will appreciate the extra blood flow.

What You will Need

Access to Albert.io's [AP Macroeconomics homepage](#). The best way to study for the Macroeconomics exam is to practice, practice, and practice. And Albert.io has the questions you need. You will be getting very familiar with these practice questions over the next month.

A flashcard site such as [Quizlet](#). Or you just use regular notecards. It doesn't really matter which one you choose, as long as you stay on top of making your flashcards. Since we will be using flashcards quite a bit, just choose the one you're most comfortable with.

Note-taking materials. These can be done on your computer, tablet, etc. or you can use a physical notepad and pen. Just like the flashcards, you're going to be taking a lot of notes, so make sure that you're comfortable using whichever version you choose.

One Month AP Macroeconomics Study Guide Cont.

The [CollegeBoard](#) homepage and [practice exam](#) page for AP Macroeconomics. Make sure you thoroughly read the AP Macroeconomics information provided by the CollegeBoard's website. Just like any other exam, it is necessary to understand the expectations of the people testing you. Read these materials and memorize them if you can.

Your own AP US Macroeconomics Textbook or an online source of that will provide you with the same amount of detail. Even if you are taking your AP Macroeconomics course through your local high school and already have a textbook or reading source, it never hurts to have a backup study guide just in case you are stuck on a topic.

Optional (but helpful) Stuff:

Any AP-style workbooks or study guides your teacher provides, or any supplemental material you find helps your study of the main materials. As we've stated before, the more the merrier when it comes to studying for the AP exams.

[Albert.io](#) has some excellent recommendations on the how to approach the AP Macroeconomics exam and other great recommendations on readings, study tips, etc. Take a look at everything the site has to offer and make your own decisions on what will work best for you.

A dictionary, which can be in print or [online](#). Some Macroeconomics concepts get a little tricky, so this might help in the long run.

A basic calculator might also be useful for small equations. You can find a free one online [here](#).

One Month AP Macroeconomics Study Guide Cont.

How to Use the Study Plan

We have designed this AP study guide to revolve around the specific expectation laid out by the CollegeBoard for the topic of macroeconomics. The CollegeBoard has laid out seven key themes that you will need to understand before taking the exam:

1. Basic Economic Concepts
2. Measurement of Economic Performance
3. National Income and Price Determination
4. Financial Sector
5. Stabilization Policies
6. Economic Growth
7. Open Economy: International Trade and Finance

You should be spending a minimum of one to two hours studying each day. All AP exams are known for being difficult. You will need to dedicate a serious couple of hours each day if you want that 5.

But we can't have you overload, either. It is important that you stay happy and healthy. Never overexert yourself. Keep on top of your sleep, healthy eating, and physical fitness. This will ensure that the information you are learning will be retained.

We have also worked in a study break every once in a while. This will help to ensure that your brain doesn't get too cluttered when sorting out all of this information in such a short period of time.

This 30-day study guide has been designed to follow a typical 7-day week schedule. This will fit perfectly into your weekly schedule with school. The study breaks have been worked into the last day of the weekend, so you can be prepared and rested for school and a new study week by Monday.

Let's Get Started!

One Month AP Macroeconomics Study Guide Cont.

WEEK 1

Day 1

First thing's first, we are going to start off by taking a look at the [AP Macroeconomics course Overview](#) that's on the CollegeBoard's website. Read this thoroughly and get to know what is expected of you. One of the most important keys to successfully passing exams is to understand the expectations of those giving the exam.

Read through pages 1 through 3 of the CollegeBoard's [AP Macroeconomics Course and Exam Description](#), paying particular attention to the ways that the CollegeBoard has set up the AP course and exam process.

Familiarize yourself with [Albert.io's AP Study Guide](#) pages, getting a feel for how our website works and where all of the information is located.

Now, let's get into the routine of this study plan:

For each and every day you are reading the material or watching a video, you will want to make somewhere between 10 and 20 flashcards (either with note cards, a folded piece of paper, or online on a site such as Quizlet). Choose a term of importance, writing it down on one side of the card, while putting the definition and a helpful hint down on the other side.

For Example:

(Side A) GDP

(Side B) Gross Domestic Product.

One Month AP Macroeconomics Study Guide Cont.

For a region, the GDP is “the market value of all the goods and services produced by labor and property located in” the region, usually a country. It equals GNP minus the net inflow of labor and property incomes from abroad.

Helpful Hint: Here are some questions that relate to the term elasticity,

- Expenditures approach: $GDP = C + I_g + G + X_n$
- C = personal consumption expenditures (durable consumer goods, non durable consumer goods, consumer expenditures for services)
- I_g = gross private domestic investment (all final purchases of capital by businesses, all construction, changes in inventories)
- G = government purchases (government spending on products and resources)
- X_n = net exports (exports – imports)

Sometimes it helps to leave some room in the significance section, so you can add more info as you learn.

Now is going to be a good time to read through the [How to Study for Macroeconomics](#) page that Albert.io has set up. This article contains some very helpful tips on how to become an excellent test-taker, especially for the AP exams.

For this 1-month study guide, we are going to pay particular attention to the recommendation that you “Set up a Study Plan.” So, as a reflection practice, try to think of how you would organize a course on Macroeconomics. It’s ok if you don’t fully know where to go from here since you just started. We can’t expect you to be an expert yet! But we do want you to think about what you, at this point, imagine Macroeconomics to be about. If you were designing an AP course, what would you focus on? Why?

Make sure that you hold onto this reflection on your expectations for this course because we will be taking a look at it again later.

OK, now get some rest and we will begin again tomorrow!

One Month AP Macroeconomics Study Guide Cont.

Day 2

It is going to be absolutely important that you take notes on the information you are gathering not only today, but in the weeks that follow. Your notepad should become your best friend and really should never leave your side as you study with us. Make sure that you're taking notes on key concepts, ideas that you might find confusing and need to come back to later, and tips on how to become a better studier.

Take a look at this [“What is Economics?”](#) video on YouTube. Don't forget to take notes on all of the key concepts that Solomon is covering. Use these notes to create flashcards. Also, make sure to write down what you find. When you're done with that do the same for this video on [“Diminishing Marginal Utility.”](#)

Now let's take a look at pages 6 through 11 of the CollegeBoard's [AP Macroeconomics Course and Exam Description](#),

Now's the time to take on some example questions from [Albert.io](#). We'll start off slow, just so you get a feeling for how the site works. We just want you to select 20 questions from any category, at random. You don't need to care about the topic or even if you get the answers correct. We just want you to get a feel for how they are phrased and the kinds of questions that you will be expected to answer.

One of the most important things to remember is that Albert.io will provide you with helpful tips and places where you can do better. Take note of your weak spots and write them down in your notebook. These are the places you will have to spend more time on as you progress forward in the days ahead.

One Month AP Macroeconomics Study Guide Cont.

Day 3

Since we are already familiar with the basics, we are going to dive right into the material today. The more and more we go through this stuff, the more the schedule should become a routine. It is essential that you stay on top of this study plan and if you start having trouble finding the desire to continue, get a friend in on the action. You can both keep each other in line and keep the study plan going.

We are going to start today off with these videos: [“Agents and Utility”](#) and [“Marginal Analysis.”](#)

Keep on top of your flashcard terms and your note taking. Make sure that you have these concepts, in particular:

- Economic Growth
- Macroeconomics
- Full Employment
- Economic Freedom
- Economic Security
- Balance of Trade

Let get into your first real set of practice questions. Go ahead and start answering the questions in the [Demands and Supply Equilibrium](#) Try not to look at any notes and treat this as if you were taking the real test itself. But it’s also early on in the study guide, so don’t sweat it if you need to look at some notes at this point.

Don’t worry if you did poorly on the example questions, this is only Day 3! We can’t expect you to be pros yet. If you’re already doing really well, great job! But you can always improve, stay on top of this 30-day routine no matter what level you are at.

Great job thus far. Hopefully, you’re getting into the swing of things!

One Month AP Macroeconomics Study Guide Cont.

Day 4

Now we are going to want to click on these links and watch the videos [“Scarcity and Opportunity Cost”](#) and [“Good Times or Good Grade.”](#) Just a reminder—you need to be watching these alongside the textbook or other online resource that you have picked up for this course. Remember the mantra, when studying for the AP exams, the more the better.

Keep on top of your flashcard terms and your note taking.

Now’s that time again—let’s do some practice questions. Today we are going to do those titled [Scarcity, Choice](#) and [Opportunity Cost](#) and [Production Possibilities](#). Again, notes are all right, but don’t rely on them.

Ok, you need a little break. Take a long walk, maybe an hour or so. On the walk go over everything you covered this week. Let the ideas flow. Try to remember what you can in your own words. Also, bring your notebook and a pen, so if you get stuck on an idea or can’t remember the definition of a term, write it down. You can revisit these tomorrow.

Day 5

Today you’re going to want to take a look at the first half of the videos on [Macroeconomics Modules](#)(that would be videos (1-20). It is essential that you take good notes with these videos. I might also recommend reviewing these again if you’re got the time. It’s time to work on your flashcard terms. Make sure that you have these terms filled out:

- GDP
- GNP
- Incomes Approach
- Expenditures Approach
- Nominal GDP
- Real GDP

One Month AP Macroeconomics Study Guide Cont.

If you can, try to get a family member or a friend in on this action. Have them quiz you on all of the flashcard terms that you have come up with thus far. Most importantly, don't just define the concepts; provide examples of how they work in our world today. Ask them if your explanations were clear. Also, have them ask you questions of their own. This will help you understand the concepts in your own way.

We are going to end today's session with a Free Response Question. Choose the first option from the [Macroeconomics FRQ](#) page and get started. It's ok if things are a little rough going here. We mostly want you to get used to how these are set up. You'll be a pro soon enough!

Get a good night's sleep, we're almost through week 1!

Day 6

Read through pages 4-22 of the CollegeBoard's [AP Macroeconomics Course and Exam Description](#). Make sure that you're taking notes on what you need to study further in your notepad.

Let's go ahead and finish the rest of the videos from the [Macroeconomics Modules](#) playlist on YouTube.

Keep on top of your flashcard terms and your note taking. Don't start slacking now, keep up with these and take notes on where you think you're struggling.

Let's go ahead and finish up the Basic Economic Concepts Section. Finish the final two sections: "[Comparative Advantage](#)" and "[Macroeconomic Issues.](#)" Since these are the final questions of the first section of the course, you shouldn't really be relying on notes anymore. You need to start treating these practice tests more like the real deal from this point forward.

One Month AP Macroeconomics Study Guide Cont.

Before we end this week, you are going to want to go back over that course outline you created on the first day. Now that you have a better idea what this course, you should redo that exercise once more. Ask yourself, how would you design a Macroeconomics course? What topics would you focus on? Would you do it differently than your current teacher or the way that the textbook is discussing the topic?

Day 7

Take it easy, catch up on your rest and we'll begin again tomorrow.

If you absolutely must do something today, review the videos we have matched thus far and glance through your flashcards.

[Start your AP Macroeconomics Prep today](#)

One Month AP Macroeconomics Study Guide Cont.

WEEK 2

Day 8

We are going to start off today by looking at a [Checklist](#) for what we have covered. Go over this and check everything that applies. If there's a topic that you haven't quite got down yet, but we have covered, review your notes.

Review all of your flashcards up to this point. Give yourself a little test by randomly selecting 30 cards and see if you can get all of the definitions correct.

Go ahead and click on the [“GDP Basics of Expenditure Approach”](#) video link and watch the video. We have watched several videos now, which ones do you like the best? Why?

Now that you've gotten the hang of how this works, we are going to go ahead and do all of the questions contained in the Measurements of [Economic Performance](#). Take your time on these and think about how and why you are answering them the way that you are.

After you've done this, review your notes and textbook on any areas you got wrong, and try to figure out why you answered the question wrong. You're going to want to do this every time we do practice questions. Try to find your weaknesses and study those points harder.

Day 9

Go to the [“Measuring National Economic Performance”](#) playlist and watch all four videos. When you've watched all of these, you're going to write down a minimum of six key words or concepts from each video. Make sure you put these and their definitions into your growing flashcard pile.

One Month AP Macroeconomics Study Guide Cont.

Make sure that you are creating notecards every day. You should have these terms down (Note: these are just terms that you absolutely must know, but don't limit yourself to just what we recommend. You need to keep adding a minimum of ten terms or ideas a day to your notes and flashcards):

- National Income
- Personal Income
- DI
- CPI
- Inflation
- Cost-Push
- Wage-Price Spiral

Let's end the day by completing the two section contained in the [Stabilization Policies](#) part of the practice questions. Keep paying special attention to Albert.io's recommendations and helpful hints. These are going to be the keys to growing as a learner and figuring out how to improve in time for your exam.

Day 10

We are going to start off with another video. Yay! Go ahead and watch the clip entitled ["An Introduction to Aggregate Demand."](#)

Back to practice question time. Today we start the Economic Growth section. Go ahead and start with the first set, called [Definitions of Economic Growth](#). Now will be an excellent time to start timing yourself. If you do not have a timer or stopwatch app on your phone/computer, you can access one here: [online-stopwach.com](https://www.online-stopwach.com). Try to treat this like a real exam, paying close attention to the time you have used up and how much time you have remaining.

After watching the videos, go ahead and look over your [checklist](#) once more. Like before, it is ok if you don't have all the concepts down here, we are just on day 10 after all.

One Month AP Macroeconomics Study Guide Cont.

But if there is a topic that we have covered that you don't feel fully comfortable with, make sure you review your notes on that topic until you are certain.

Finally, we are going to end with a little study break, combined with a physical activity that should jog your memory as well. Take a long walk, hopefully for at least an hour—if you have the time. On the walk go over everything up to this point. This does not have to be too structured. Try to remember what you can in your own words.

Also, bring your notebook and a pen, so if you get stuck on an idea or can't remember the definition of a term, write it down.

When you get back from your walk, look up any ideas or concepts that you don't have a complete grasp on.

Day 11

If you can get a family member or a friend in on your studying, you should ask them to help you for the beginning of your study session today. If you can, explain to them everything you have covered up to this point. You can use the course outline that you've been working on. Try to treat this as if you were the econ teacher giving a class to a new student. Encourage them to ask questions and try your best to answer them.

Watch the second video of the Aggregate Series, the one entitled [“An Introduction to Aggregate Supply.”](#)

Keep on top of your flashcard terms and your note taking. Keep in mind that you need to be adding concepts from the readings and the videos we are watching.

One Month AP Macroeconomics Study Guide Cont.

You should have these in your growing list by now, as well:

- Rule of 70
- Real Values
- Nominal Values
- Full Employment
- GDP Gap
- Okun's Law
- MPS
- MPC

It's time to finish up with the [Economic Growth](#) set of practice questions. Complete any that remains. Take notes on which questions you are struggling with and make sure to review these topics from the videos and other readings we have been going over.

Day 12

Take a thorough look at pages 22-25 of the CollegeBoard's [AP Macroeconomics Course and Exam Description](#). After finishing this, is there anything you would add to the course outline that you began on day one? Are there any concepts that you are missing or would choose to focus more time on?

OK, so for the next two days, we are going to do a couple of practice exams and try to recreate the exam itself as best we can. Make sure that you are in a quiet space, where you can focus for the next two or three hours and nobody will disturb you.

Have your stopwatch or clock ready, so you make sure that you are staying in line with the time limits required by the CollegeBoard. For today and tomorrow, absolutely no notes. Also, have some water or maybe even a small snack, that way you won't have to get up and break your concentration.

One Month AP Macroeconomics Study Guide Cont.

Reminder, you have 70 minutes to complete the multiple choice section and 60 minutes to complete the FRQs section.

And now we begin with the multiple choice questions. Go to our [AP Macroeconomics](#) page and select ten questions from each of the seven sections that on the page. Select these at random. Complete them within the required time limit.

Once you have done that, it's time to move on to the FRQs. Complete the questions from the year [1999](#). These were questions from an actual AP Macroeconomics test, so make sure that you are getting a good feel for how these work.

Whew! Take a breath. Good job on completing your first real practice exam. Before we the rest of the day off and relax, read through all of the answers and recommendations that these sites are offering you.

Day 13

Today, we are going to be focusing more on the FRQ section of the AP exam.

So, the first thing we are going to do is work through the remaining [FRQs](#) that Albert.io has come up with for us. Just like yesterday, you want to keep timing in mind. Also, you want to make sure that your writing is at a college level. Watch for errors in spelling and punctuation. Keep good writing habits.

Once you are done with that, go ahead and try to answer the FRQs from the years [2000](#), [2001](#), and [2002](#) from the CollegeBoard Website.

Before we get into our rest day, review everything you have done over the last two days. Go over all of the answers and recommendations. Ask yourself: What types of questions did I do the best on? Where do I need to focus my studies? How can I improve?



One Month AP Macroeconomics Study Guide Cont.

Day 14

Get a good night's sleep; we begin a new day of this study guide tomorrow.

[Start your AP Macroeconomics Prep today](#)

One Month AP Macroeconomics Study Guide Cont.

WEEK 3

Day 15

Now that you're feeling refreshed and ready to take on our studies again, go over any notes that you made two days ago. Pay attention to where you think you need to improve. These are the things we are going to want to focus on this week, so keep them in mind all week long.

Today, you are going to work on the FRQs from the [2003](#), [2004](#), and [2005](#) exams. Give yourself a five-minute breather in between each question. After you've completed these, look through the notes provided by the CollegeBoard site and see how you compared.

Let's get back on track with our videos, shall we? Take a look at the first 5 videos that [ACDCLeadership](#) has posted on their Macroeconomics YouTube playlist. While you are watching, make sure that you are taking notes on key concepts and adding to your flashcard pile.

Select 30 flashcards at random and quiz yourself. Better yet, if you've got a friend or family member around, have them quiz you.

Since you are right around the halfway mark, now is a good time to go over everything we have covered up to this point. Go over the notes that you've taken and make sure you are grasping everything. In particular, review the notes that Albert.io has provided from your test scores. Find your weakest points and work on making them stronger.

One Month AP Macroeconomics Study Guide Cont.

Day 16

Before we begin, you should go for a walk and try to think on everything we have covered to this point. While you're doing this, think back on the course we've been working on since we started. What would you add? Would you leave anything out? Why? What topics would you spend the most time on?

Keep on top of your flashcard terms and your note taking. It may be a good time to review those that you have made up to this point as well. Here are some key terms:

- Multiplier Effect
- Balanced Budget Multiplier
- Required Service Ratio
- Money Multiplier
- Federal Reserve Bank
- Discount Rate
- Open Market

Today, we are going to finish the first half of questions under the [International Trade and Finance](#). Also, make sure that you're all caught up with these example questions. Now would be a good time to complete any you have not finished.

Select and work on the FRQs from [2006](#). You are going to want to have someone else take a look at what you've written. Begin with a friend or family member and ask them to take a look at your response. Ask them to proofread and to give recommendations on how you could improve. Take their comments to heart, since you are writing for more than yourself. It's always a good idea to have others read your work.

One Month AP Macroeconomics Study Guide Cont.

Day 17

Now is going to be a great time to revisit your course outline notes that you started on day 1. Go ahead and update your imagined course with all of the information that you have learned up to this point. Again, if you can, get a friend or family member in on this action. And encourage them to ask questions!

Review your flashcards once more. Make sure you have these terms/concepts:

- M1
- M2
- M3
- Assets
- Stagflation
- Net Export Effect

We are going to keep going with our example questions and finish up with the rest of the section entitled [International Trade and Finance](#). Keep looking at your time and make sure you look over the notes and recommendations that are provided to you.

Since we have already completed a number of example FRQs, now would be a good time to review those you have already completed. Read over all of the answers that you have provided thus far. How would you answer them differently? If you were grading the exam as a member of the CollegeBoard, what grade would you give yourself?

Day 18

Before we get rolling today, go over your [checklist](#) one more time. What do you need to work on? What have you missed? Spend the next ten minutes going over anything else you might need a refresher on.

One Month AP Macroeconomics Study Guide Cont.

Take a look at the next five videos that [ACDCLeadership](#) has made for Macroeconomics students just like you. Keep up with your flashcard making as you watch these.

Now, you are going to want to work on the first chunk of questions in the National Income and Price Determination section, the one called [Aggregate Demand](#).

Choose the FRQ from the years [2007](#) and [2008](#). Answer them to your best ability. Now you should have your teachers reading through your responses. Ask them for specific feedback on how to write a better response. Get them to guide you on how to improve as both a writer and someone who is studying the AP exams.

Day 19

Glance over your notebook, dedicating, at least, twenty minutes to the areas that you are having the most trouble.

- Flashcard terms:
- Philips curve
- Supply-Side Economics
- “Old” Classical Theory
- “New” Classical Theory
- Rational Expectations Theory
- Monetarism

Go for another long walk (or whatever healthy activity that helps you relax) and afterwards, sit a friend or family member down and tell them everything you’ve learned this week. Encourage them to ask questions. The more the better. The more you are able to explain these concepts with your own thoughts and without notes, the better grasp you’ll have. And then have them tell you ways that you might improve your ideas and arguments.

One Month AP Macroeconomics Study Guide Cont.

Select, at random, thirty example questions provided by [Albert.io](https://albert.io). You will have already completed these questions, but you should do so one more time. If you find yourself stumbling on any of these, make sure you review your notes and textbook in order to help you understand what you are doing wrong.

Day 20

Since we are getting towards the end of the new material covered in this Macroeconomics Overview, go through the course outline that you've been working day 1. Add the information that we have covered since last time. As you read over your earlier notes, are you surprised by anything? How would you think about ending the course? What recommendations would you give your students on how to study for their AP exam?

Let's finish off the remaining videos from [ACDCLeadership's](#) Macroeconomics playlist page. How has this video series compared to the others we've watched?

Don't slack on your flashcards and note taking now. You've come so far!

Complete the final two sections from the [National Income and Price Determination](#) example questions. Are you still struggling with any particular topics? If so, work on your reviews of those specific sections of the course. Keep in mind that Albert.io has all sorts of recommendation on where to move forward as well.

Work on the FRQ from the year [2009](#). Make sure you are keeping on track with the timing on these questions.

Day 21

The end of another week! Get a good night's sleep; we begin anew tomorrow.

[Start your AP Macroeconomics Prep today](#)

One Month AP Macroeconomics Study Guide Cont.

WEEK 2

Day 22

Now is an excellent time to finish the first two sections of The [Financial Sector](#) chunk of questions.

Work on the FRQs from the years [2010](#) and [2011](#). Review your notes and textbook on any areas you got wrong, and try to figure out why you answered the question wrong. Are you missing an important piece of knowledge about the course material, or did you just get tripped up on the wording of the question?

Make sure that you've taken notes on these concepts:

- Appreciation
- Depreciation
- Fiscal Policy
- Monetary Policy
- Favorable Trade Balances
- Unfavorable Trade Balances

After you've got these down, review all of your flashcards up to this point. Give yourself a little test by randomly selecting 30 cards and see if you can get all of the definitions correct. If you can get a friend to help out, that would be great.

Day 23

It's time to watch our final video. Go ahead and click on the link [Fiscal Policy](#). In your notes, you should try to outline the key concepts of this video. What is its purpose? What central questions is it raising and answering? How does it connect to the concepts we have covered up until this point in our study plan?

One Month AP Macroeconomics Study Guide Cont.

Review your flashcards and notes. Here are some terms:

- Sticky Prices
- Great Depression
- John Maynard Keynes
- Transfer Payments
- Nondurable Goods
- Indirect Taxes

Finish off every last question that you might have not answered from The [Financial Sector](#) and any other section you may not have completed in its entirety. It is absolutely important that you've pinpointed your weakest spots at this point. Anything that remains unclear should be reviewed once more.

The last thing you want to do today is look back over the [checklist](#). At this point, you should be feeling confident at nearly every check-mark spot. If you find yourself struggling with some of the ideas, you are definitely going to want and review that material before you check it off.

Day 24

Today, you are going to finish reading the rest of the CollegeBoard's [AP Macroeconomics Course and Exam Description](#). Take notes on what you think is most important.

After completing this reading, take out your notepad and go back over the course you've been working on throughout this study plan. How have you organized the course? What topics have you highlighted as important concepts to teach? Does your version of the course differ from the ways that your textbooks or other sources deal with the material? What else would you add to help your students out?

One Month AP Macroeconomics Study Guide Cont.

Get to work on the FRQs from the years [2012](#) and [2013](#). After you have finished with these, write an explanation of how you came to the answers. How would you explain the answer itself to the person grading the exam? Or, maybe, how would you teach the answer to someone just starting to study Macroeconomics?

Day 25

Before we start working on some example FRQs, take out your notebook and work on this thought exercise: Explain what Macroeconomics means in no more than four sentences. Highlight what you consider to be the most important concepts and ideas. But make sure you are to the point and short in your answer.

When you have completed this exercise, go ahead and get back on the CollegeBoard's Macroeconomics site and start working on the FRQs from the years [2014](#) and [2015](#). Make sure that you are reading the recommendations on how to answer these questions after you've completed them. These notes will help you better understand the CollegeBoard's expectations.

Keep on top of your flashcard terms and your note taking. Here are some concepts you should be adding to your growing collection at this point:

- Net Factor Payments
- Underground Economy
- GNI
- Frictional Unemployment
- CPI
- Natural Rise of Unemployment
- Producer Price Index

Make sure that you are all caught up on your FRQs and example questions. Now is the time to complete everything you have missed. Also, make sure that you are caught up on all of your reading, online videos, and flashcards.

One Month AP Macroeconomics Study Guide Cont.

Day 26

Before we begin with any new material, read through all of your notes. What have you been struggling with the most? Pinpoint your weakest spots and go over them once more. If you are having trouble with a specific concept, try to explain it to a friend. Have them ask questions until you've got the solutions.

After you have done this, go over your [checklist](#) one last time. You should be able to knock everything off this list with confidence. If you are still struggling with ideas, go back and review your notes and the videos.

Review your flashcards once again. If you can, have a friend quiz you on as many as you can handle at this point. Make sure that you have these in the pile:

- Paradox of Thrift
- Fiat Money
- Structural Deficit
- FOMC
- Cost Shock
- Supply Shock
- Bond
- Stock

Now is the time to retake all of the example questions that you may have gotten wrong over the last several weeks. Keep taking them until you get the right answer, reading through Albert.io's recommendations after each attempt. Do this again with each of the FRQs.

Day 27

Read over your notes on the FRQs. You should create the top three that you feel the least comfortable with. This second time around should be much easier. If you can, keep having as many other people as possible read your answers.

One Month AP Macroeconomics Study Guide Cont.

Don't slack now, keep up with your note taking. Like the other suggestions, we have provided you with, make sure that you have these in your notes:

- Tariff
- Dumping
- GATT
- NAFTA
- Balance of Payments
- Balance of Trades
- Smoot-Hawley Tariff
- Laffer Curve

Make sure that you have completed any remaining FRQs or practice questions from Albert.io that you may have missed. It is essential that you take as many examples questions as possible. After you have done this, select another [30 example questions](#) at random. You may be answering some of these questions more than once, but that's good, you should know the answers by heart at this point!

Before we take a break tomorrow, you are going to want to write a complete outline of everything that the Macroeconomics course has covered. Make sure that you create a new one—don't use your course outline. Do this one off the top of your head.

Once you've done this, compare this outline with the one you've been working on all month. Are they similar? Different? Why do you think this might be?

One Month AP Macroeconomics Study Guide Cont.

Day 28

This is our last rest day, so use it wisely. Make sure you get your rest today.

You may be getting tired by this point, but don't worry; there are only two days left of this 30-day study plan.

Keep up the good work and see you tomorrow!

[Start your AP Macroeconomics Prep today](#)

One Month AP Macroeconomics Study Guide Cont.

REVIEW

Day 29

Today is going to be your final day of review. You should be feeling very confident about your future exam. Now's the time to work out the final kinks and get you read for the exam itself.

If you can get a friend or family member to help you out today, that would be fantastic. If not, just make sure you don't burn out—you've come so close!

First off, take a look over all of your notes, including all of the outlines you have created, the FRQ answers you have come up with, and all of the responses to the questions that have been posed over the last several weeks. Read your notes thoroughly and double-check your familiarity with all of the concepts and ideas.

Next, you are going to want to review all of your flashcards and notes. Polish up those final weak spots you see and be proud that you're getting better at the terms. It may seem repetitive to do this now, but one last time can't hurt, right?

Review all of your example question scores from the [AP Macroeconomics](#) site by Albert.io. If you still have some questions that were answered incorrectly, go back and retake these until you have reached 100 percent correct. Take a look at Albert.io's notes and recommendation for how to improve and better understand the concepts you might be missing.

Review all of the FRQ you have answered. Ask yourself: Which ones were the strongest? Weakest? Can you see yourself getting progressively better? Take notes in your notebook on where you need to do better. Be as specific as possible.

One Month AP Macroeconomics Study Guide Cont.

Day 30

You did it! You made it to the last day: congratulations.

Today is a day that you mentally prepare for your exams. You can try going for a walk, or whatever has helped you relax and prepare over the last month.

No matter what you decide, try not to focus on the exam itself too much. Instead, you're going to want to focus on being prepared for the exam itself. Get your stuff ready. Water? Check. Pen/Pencil? Check. Get everything in order.

Again, stay healthy! Drink plenty of water to stay hydrated and eat healthy foods, so your body is thinking only about the upcoming exam. And especially get a good night's sleep. This is probably the most important thing you can do.

You've worked really hard to get to this point, so congratulations on staying on top of this 30-day study plan – you'll do great!

If you have kept up with this daily study guide, you will have:

- Notes, key terms, and flashcards on every section of the course.
- A deep and thorough understanding of how the models and ideas of macroeconomics work both in theory and the world we live in today.
- Observed dozens of visual examples of economic processes work through expansive informational videos and hypothetical scenarios raised by the texts.
- Completed a broad range of example Free Response Questions and practiced with over a thousand multiple choice questions!

One Month AP Macroeconomics Study Guide Cont.

For however much time you still have after completing this AP study, make sure to periodically review your notes, key terms, flashcards, and timeline. In particular, you are going to want to go over all of the material provided by [Albert.io](https://albert.io). If there are any themes or questions that you cannot check off confidently, make sure that you review the notes and flashcards you have taken for that particular section of the course. Staying healthy and getting enough rest is the most important thing you can do at this point. You've worked so hard over the last month; don't cancel it out now by staying up too late or eating terrible food that makes you feel non-alert and slow. On the night before the exam itself, eat a healthy dinner and get plenty of sleep. On the day of the exam make sure you have a good breakfast and that you bring snacks for the test itself. Finally, maintain that feeling of confidence. The fact that you completed this comprehensive 30-day study guide shows your dedication and drive. Keep up with the hard work and good luck!

***Let us know** what has worked for you. What did you like best about this one month study guide? Do you have recommendations of your own on how to study for the AP Macroeconomics exam?*

[Start your AP Macroeconomics Prep today](#)

The Ultimate List of AP Macroeconomics Tips



GDP, national budget, loanable funds market, macroeconomics equilibrium... if these terms fill you with dread or anxiety, you might be studying for the AP Macroeconomics exam. Even if you haven't started studying yet, AP Macro may seem overwhelming at first. There are so many terms, graphs, and concepts you have to develop a deep understanding of. So *how* should you actually study? *What* should you focus on?

The Ultimate List of AP Macroeconomics Tips Cont.

First, let's take a look at the AP Macro exam's 2015 score distributions to understand the level of difficulty of the exam a little better:

- 8% of test-takers earned a score of 5
- 22% received a score of 4
- 3% got a score of 3
- 5% earned a score of 2
- 4% received a score of 1

(Fun fact: 18 test-takers out of 127,000 worldwide got a perfect score on the exam)

As you can see, a large portion of students (29.4%) only received a score of 1. However, over half (53.1%) of test-takers passed the exam. This means that although the AP Macro exam will be difficult, it is definitely doable. It will require dedication, motivation, and inspiration, but if you set out to pass the exam, you have a good chance of doing just that.

This ultimate list of 40 AP Macroeconomics tips will give you a crash-course on how to get the best possible score on the AP Macro exam. Read on for tips, strategies, hints, and important information you need to know to conquer the exam.

AP Macroeconomics General Exam Tips

1. Know the format of the AP Macroeconomic exam. You will have two hours and 10 minutes to complete the two parts of the exam: a 70-minute multiple-choice section and a 60-minute free-response section. The multiple-choice section is worth two-thirds of your final score and the free-response is worth one-third.

The Ultimate List of AP Macroeconomics Tips Cont.

2. Watch macroeconomic review videos. Mr. Clifford from [ACDCLeadership](#) has five units of macroeconomics videos covering everything from the production possibilities curve to the Phillips Curve, and from the money multiplier to international trade. These videos are fun, engaging, fast-paced, and humorous. If you ever need a break from reading, check out a few of his videos for a change of pace. Watching videos on certain topics is a great way to reinforce the concepts you've already learned, or show you a new way of looking at a concept you previously struggled with. [Khan Academy](#) also has several macroeconomics videos on topics covered in a traditional college level introductory macroeconomics course.

3. Be aware of the common mistakes. Learn from the mistakes of past test-takers! Over the course of several years, the most common errors students have made on the AP Macroeconomics exam include:

- Confusing the change in demand with the change in quantity demanded
- Mixing up change in supply with change in quantity demanded
- Not labeling graphs correctly, or not labeling them at all
- Not understanding the effects of Monetary Policy and Fiscal Policy on Interest Rate
- Not having a full understanding of:
 - Money and Banking
 - Long-Run Aggregate Supply
 - International Economics
- Not knowing the difference between Real and Nominal
- Confusing comparative advantage calculations
- Not being able to distinguish between demand-pull inflation and cost push inflation

The Ultimate List of AP Macroeconomics Tips Cont.

4. Invest in a review book. If you haven't bought an AP Macroeconomics review book yet, do it now! A common mistake is to wait until the weeks leading up to the exam to buy and use a review book. Don't do this. AP review books are comprehensive, concise, and quick to flip through. Start using them at the beginning of the year. Most come with practice tests, helpful test-taking strategies, study guides, study plans, and more. Try [5 Steps to a 5](#), [Barron's](#), or [REA's Crash Course](#). Review books don't just teach you what you need to know for the exam, but also what you need to know to pass the exam (which most textbooks ignore)!

5. Review all of the important graphs. On the AP Macro exam, you will have to interpret a wide variety of economic graphs on the multiple-choice section and draw them during the free-response section. Understanding these graphs is essential. Make sure you know how to correctly label, draw, and analyze each of these graphs:

- Production Possibilities Curve
- Supply and Demand
- Loanable Funds Market
- Money Market
- Foreign Exchange Market
- Aggregate Supply and Demand
- Phillips Curve
- [Investment Demand](#)
- [Domestic/World Tariff](#)

6. Review all the formulas you need to know. For the free-response and multiple-choice sections, you will need to know certain macroeconomic formulas, ranging from Real GDP to the unemployment rate, and from the tax multiplier to the GDP deflator. You can find a full, detailed list of all the formulas you need to know on [The Economics Classroom website](#). Memorize these formulas and practice using them in the context of the AP Macro exam.

The Ultimate List of AP Macroeconomics Tips Cont.

7. Study using flashcards. There are a lot of key terms you need to know for the AP Macro exam. Simply reading your textbook is not enough to learn and memorize these terms. You need to be actively and consistently looking at these words and gaining a better understanding of them. To do this, try flashcards! [The Economics Classroom](#) has great macroeconomics e-flashcards – 150 in all! You can study flashcards for a specific unit and shuffle through them. The definitions for each key term even include links to further definitions. [Quizlet](#) also has a list of 144 AP Macroeconomic vocabulary terms you need to know. Hand-write out your own flashcards to carry with you wherever you go. You can never be too busy for flashcards; you only need to go through a few for 10 to 15 minutes each day.

8. Follow macroeconomic blogs and social media accounts. It's important to incorporate macroeconomics into your everyday life. However, this doesn't mean you need to have your nose in a book all day everyday! Try following a few macroeconomics accounts on social media and read a few blogs on a daily basis. The simple act of seeing information in a different way can help you learn more than if you just read your textbook. "Like" [Economy Watch](#) on Facebook, follow [AP Macroeconomics boards](#) on Pinterest, track the #macroeconomics tag on Twitter, and follow blogs like [Mr. Karmin's AP Economics Blog](#) or [Steve Latter's AP Macroeconomics Blog](#).

9. Use online study guides. Many teachers and students have created comprehensive AP Macro study guides that highlight the key information you should know for the exam, such as [Charles Feng's AP Macroeconomics](#) and [Dave Forrest's AP Macroeconomics Study guide](#). Print these out and keep them in your binder or notebook. Make sure you review the information in these study guides regularly. Even if you're already comfortable with a topic, don't disregard it entirely. You should spend less time on topics you're confident about, but still revisit those concepts from time to time.

The Ultimate List of AP Macroeconomics Tips Cont.

10. Check out AP Macroeconomics Apps. Since you probably have your phone with you 24/7, why not download study material onto it? You can pull out your phone while on the bus, when sitting in waiting rooms, or whenever you have spare time and don't want to drag your textbook or flashcards out. The best apps are not free, but you can get great apps for as low as \$1.99. Try Jacob Clifford's [AP Macroeconomics Review](#) (which has great reviews from past AP test-takers) or Double Bottom Line Partner's [AP Macroeconomics Exam Prep](#). Both come with a huge amount of multiple-choice questions, answer keys, explanations, and exam tips and strategies.

[Start your AP Macroeconomics Prep today](#)

The Ultimate List of AP Macroeconomics Tips Cont.

AP Macroeconomics Multiple-Choice Tips

1. Know the format of the AP Macro multiple-choice section. You will have 70 minutes to answer 60 multiple-choice questions. This section counts for 66% of your entire exam score, so it is an extremely important part of the exam. You will be tested on your economic content knowledge, your economic reasoning skills, and how well you analyze different hypothetical situations.

2. Know the concepts covered on the exam. The College Board offers a topic outline in their [AP Macroeconomics Course Description](#). The concepts in the table below are general, but the course description gives a more detailed outline, which you can look over for more specific information. Keep in mind what content areas make up the highest percentage on the multiple-choice section and what make up the lowest percentage. Plan your studying time wisely.

Content Area	Specific Concepts	Percentage of Multiple-Choice Section of Exam
Basic Economic Concepts	<ul style="list-style-type: none"> - Scarcity, choice, and opportunity costs - Production possibilities curve - Comparative advantage, specialization, and exchange - Demand, supply, and market equilibrium - Macroeconomic issues: business cycle, unemployment, inflation, growth 	8-12%
Measurement of Economic Performance	<ul style="list-style-type: none"> - National income accounts - Inflation measurement and adjustments - Unemployment 	12-16%
National Income and Price Determination	<ul style="list-style-type: none"> - Aggregate demand - Aggregate supply - Macroeconomic equilibrium 	10-15%
Financial Sector	<ul style="list-style-type: none"> - Money, banking, and financial markets - Loanable funds market - Central bank and control of the money supply 	15-20%
Stabilization Policies	<ul style="list-style-type: none"> - Fiscal and monetary policies - The Phillips Curve 	20-30%
Economic Growth	<ul style="list-style-type: none"> - Definition of economic growth - Determinants of economic growth - Growth policy 	5-10%
Open Economy: International Trade and Finance	<ul style="list-style-type: none"> - Balance of payments accounts - Foreign exchange market - Imports, exports, and financial capital flows - Relationships between international and domestic financial and goods markets 	10-15%

The Ultimate List of AP Macroeconomics Tips Cont.

3. Budget your time wisely. Since you must answer 60 multiple-choice questions in 70 minutes, you have just over a minute to spend on each question. As a general rule, there will be about 10 to 20 “easier” questions that you can spend less time on. The rest require analysis and synthesis which can make things much more complex. Answer the “easy” questions quickly to save time for the “harder” questions.

4. Be aware of the calculator policy. Calculators are NOT allowed on any part of the AP Macro exam. You will only be required to use basic math skills on the exam, so don’t even touch your calculator when working through practice multiple-choice questions.

5. Keep in mind standard multiple-choice strategies. Since the multiple-choice section on the AP Macroeconomics exam is so important, you should know some general techniques and tips on answering multiple-choice questions. Keep the following in mind:

- Answer EVERY question (no points are deducted for wrong answers)
- Use the process of elimination to narrow down the answer choices
- Pick a letter you will fill in (a, b, c, d, or e) if you have absolutely no idea what the answer is. Use this letter each time you cannot make an educated guess, or use the process of elimination. Odds are you will get at least some of these random selections right.
- Use other questions and answer choices to give you hints, or jog your memory, for questions you’re stuck on.
- Watch out for “EXCEPT” or “NOT” questions
- Don’t be afraid to underline, circle, and cross out
- Try to answer the question before reading the answer choices given.

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The Ultimate List of AP Macroeconomics Tips Cont.

AP Macroeconomics Free Response Portion Tips

1. Know the format of the free-response section. On the AP Macro FRQ section, you will have three questions to answer in 60 minutes. This 60 minutes includes a 10-minute mandatory reading/planning period. You will have one long essay that makes up 50% of your free-response score, and two shorter essays which each count for 25% of your FRQ score. For all three of these essays, you will need to use your analysis and evaluation skills to connect different content areas. You may be asked to incorporate graphs or diagrams to show macroeconomic principles. Keep in mind that the free-response section counts for 33% of your entire AP Macroeconomics exam score.

2. Plan your answers! You will be given a 10-minute reading period to plan the answers to all three FRQs. Use this time wisely. Read and re-read the questions, analyze the problems and how you can solve them or explain them, then jot down a few points you want to touch on. Don't spend time writing out a rough draft, but use these 10 minutes to understand the question and come up with a rough idea of what you want to say.

3. Label your graphs as clearly and fully as possible. Label, label, label. There should *always* be labels on your graphs. Be sure to label each axis, identify the curve on the graph, title your graph, show changes in curves with arrows, and whatever else you need to make sure your graph will be clear to the AP readers. You will lose points for not including correct, clear labels!

4. Label your answers according to the question prompt and answer them in the same order. Don't make things confusing for you or the AP readers. Many of the AP Macroeconomics free-response questions are multi-part. This means that for one question, there will be parts (a), (b), (c), etc. If this is the case, label your answers as (a), (b), (c), etc. This will keep you on track and make sure that you don't leave anything out or miss a question. It will also make it quicker and easier for the AP grader to look at your work. It's also important to realize that each individual part is awarded credit independently, so you should, at least, attempt every part.

The Ultimate List of AP Macroeconomics Tips Cont.

If you can't answer part (a) or if you give a wrong answer, you can still receive full credit for your answers to part (b) and part (c). Make sure to answer the parts in the correct order as well.

5. If the question asks you to draw a graph, draw a graph! You should always pay close attention to what the question is asking you to do. If the question explicitly tells you to draw a graph, you need to do this in order to receive full credit. However, if a question does *not* say anything about drawing a graph, you still can! Many test-takers struggle to explain their economic reasoning using the written word, especially when it comes to economic terminology. If you include a graph that shows that you know what you're talking about, you could receive partial credit for showing that you understand the concept, even if the written word fails you. That being said, graphs are not meant to be a stand-alone answer. Don't rely on drawing graphs to answer FRQs without offering written answers; this will not get you a high score!

6. Do not restate the question. You've probably spent a majority of your school life being told by teachers to always restate the question in your answers. Ignore this idea for the AP Macro exam. The AP graders know the questions inside and out; they don't need to be reminded of what you are answering. Do not waste your valuable time restating the question in your answer. Get to the point right away.

7. Budget your time. Learning to budget your time on the AP Macro exam can mean the difference between a score of 3 and a score of 5. You need to spend an adequate amount of time on each FRQ since each of them is important. The first free-response question is the longest and counts for 50% of your FRQ section score. For this reason, you should spend half of your FRQ time on this essay. Use 5 or 10 minutes to read the question and understand the meaning, then devote 25 minutes to writing your answer. The remaining two FRQs are short and count for 25% of your free-response score. Spend a few minutes reading each question, then devote about 12 minutes to writing each of these FRQs.

The Ultimate List of AP Macroeconomics Tips Cont.

8. Know the AP Macro buzzwords. The key buzzwords to look out for on the AP Macroeconomics free-response section include: Show, Identify, Calculate, and Explain. But *how* exactly should you answer each of these questions? Let's find out:

Buzzword	How to Answer
Show	For this type of question, you will need to diagram or graph a macroeconomic effect to illustrate your answer. Add as many correct labels as you can! (If you don't add labels, you will not receive full credit for your answer.)
Identify	If you are asked to identify something, you will need to provide a short, direct response. Do not add further explanations or elaboration. An "identify" response might be as simple as a list, a label on a graph, or a short sentence like "unemployment will rise."
Calculate	For "calculate" questions, you must apply a formula or mathematical operation to come up with a numerical response. Be sure to show your work!
Explain	To answer an "explain" question, walk the reader through your economic reasoning. Include what will happen, and describe why or how it happens. You can include graphs and symbols in your answer. A good tip here is to make sure you include the word "because" in your answer.

The Ultimate List of AP Macroeconomics Tips Cont.

9. Get your economic lingo down. You need to convince the AP Macro graders that you know what you're talking about. This means that you absolutely must have your economic vocabulary down, especially for the FRQ section. What does this mean? Well, let's take a look at a few examples:

- Instead of saying “went up,” say “increased.”
- Instead of saying “went down,” say “decreased.”
- Do not say that curves “move.” Say that curves “shift.”
- Curves do not shift up or down, they shift left or right.
- Use “money” correctly:
 - “Money” should only be used when discussing Money Creation and Money Supply.
 - Do not write “money” when you mean “income.”
 - Do not write “money” when you mean “currency.”

Incorrect Lingo	Correct Lingo
“People bought more things with their money.”	“Consumer spending increased.”
“People made more money.”	“Households earned increased income.”
“The federal reserve made more money.”	“The Federal Reserve increased the money supply.”
“The government spent more money to help the economy.”	“The federal government pursued expansionary fiscal policy by increasing government spending in response to a recession.”

Source: [JB's Advanced Placement Macroeconomics](#)

The Ultimate List of AP Macroeconomics Tips Cont.

10. Practice, practice, practice. You will struggle on the AP Macro exam if you don't practice. You must learn *how* to take the exam in order to maximize your score. The [College Board website](#) provides past AP Macro free-response essay questions, along with sample student responses, grading rubrics, and score distributions from 2003 to 2015. Start by reading through a few questions and their sample responses. Look at why a certain essay received a higher score than another essay. Then, try a few questions on your own without looking at the rubric or sample responses. Once you're finished, compare your answers to the scoring guidelines and past student responses. What score would you give yourself? How can you improve? Did you leave anything out that you should've included? Did you over-complicate your answer? Check out [Albert.io](#) for practice FRQs with sample answers and a wide variety of practice multiple-choice questions.

The Ultimate List of AP Macroeconomics Tips Cont.

Tips From AP Macroeconomics Teachers

1. Simplify the question. AP question writers will try to wrap simple concepts in unfamiliar language. For this reason, try to find out the question's true meaning. Simplify it in your own words to get a better grasp of what the question is asking you.

2. Draw graphs to help with multiple-choice questions. Many of the multiple-choice questions will be complex. If you need to, draw a graph in the question booklet to help visualize a problem and find the solution, especially when it comes to multi-element questions. Thanks to Mr. T. from Spartanburg High School for the tips!

3. Aggregate Demand (AD) and Aggregate Supply (AS) are the heart of the exam. It is nearly impossible to pass the AP Macroeconomics exam without having a firm understanding of the AD/AS model. You will have to interpret, use, and draw graphs to prove your knowledge on the exam. The long FRQ will almost always require an AD/AS diagram.

4. Know the best bets for the two short FRQs. More than likely, the two short free-response questions on the AP Macro exam will include one of the following topics:

- Exchange rates, foreign exchange markets, determinants of exchange rates
- Effect of a change in deposits in the banking system, using the money multiplier
- Causes and effects of changes to the nominal and real interest rates, highlighting the money market and loanable funds market
- Money market showing the effect of monetary policy
- Phillips Curve diagram showing the relationship between inflation and unemployment

Thanks to Mr. T. from Spartanburg High School for the tip!

The Ultimate List of AP Macroeconomics Tips Cont.

5. Know the common topics for FRQ #1. The long free-response question could include topics from multiple units. You might see:

- AD/AS Model – 95% of the time.
- The Phillips Curve -55% of the time.
- Fiscal Policy- 55% of the time.
- Monetary Policy – 55% of the time.
- Loanable Funds – 25% of the time.
- FOREX – 25% of the time
- Growth Policy – 25% of the time.

6. Never use the words “maybe,” “probably,” or “might” in your FRQ response. You need to make a stand in your FRQs. Don’t try and cop your way out of making a choice by using wishy-washy words. You run the risk of contradicting yourself or appearing unsure if you do this. Thanks to Mrs. W. from Chatfield Senior High for the tips!

7. Explain concepts to yourself on paper. While you’re reading your textbook, review books, or watching videos, you should take notes. However, and this is going to sound like a broken record to many of you, make sure you’re writing notes in *your own words*. Thanks to Mr. N. at Klein Oak High School for the tip!

8. Draw LARGE graphs. If you’re asked to draw a graph, make sure your “correctly labeled” graph is drawn large enough so that the AP graders can see your labels and the shifts and effects you’re trying to show.

9. You do NOT need to write paragraphs or even full sentences for your FRQ response. You should try and stay concise, clear, and succinct with your AP Macroeconomics free-response answers, so it’s not always necessary to include full sentences. However, use your best judgment and make sure to address the verb prompts (“identify,” “explain,” “calculate,” etc.). Thanks to Mr. E. from Fountain Valley High School for the tips!

Are you a teacher? Do you have an awesome tip? [Let us know!](#)

The Ultimate List of AP Macroeconomics Tips Cont.

Tips From Previous AP Macroeconomics Students

- 1. Read [Naked Economics](#).** While this book won't necessarily get you a 5 on the exam, you'll gain a solid intuitive understanding of important economic concepts. It's a really interesting read and helps break up the monotony of dry textbooks.
- 2. Practice over and over again.** I found that practicing multiple-choice questions and FRQs over and over again made me better at answering them. The exam can only ask you so many questions in so many ways, so you may see familiar questions on the exam.
- 3. Watch [No Bull Economics Lessons](#) on YouTube.** They have detailed, yet simple, explanations of all the graphs you need to know for AP Macro. If you study anything for the exam, study the graphs!
- 4. Videos are helpful!** I had a really hard time digesting information that I was reading from the textbook. I feel that AP Macroeconomics is a course that really needs to be learned visually. Reading from a book and trying to interpret graphs after that is difficult. That's why videos are so helpful. Search YouTube for macroeconomics concepts you're struggling with; this can be a lifesaver!
- 5. Don't be afraid to draw AD/AS graphs in the test booklet to help answer multiple-choice questions.** Visualizing the problem is really helpful when trying to answer a tricky question.

The Ultimate List of AP Macroeconomics Tips Cont.

6. Know the recurring themes. As I skimmed over all the past free-response questions, I found a few recurring themes that you should definitely go over before the exam:

- Price level
- Output
- Comparative/Absolute advantage
- Interest rates
- Exchange Rates
- Aggregate Supply & Demand Graph
- Fiscal policy
- GDP
- Long-run & Short-run aggregate supply

Are you a student? Do you have an awesome tip? [Let us know!](#)

The AP Macroeconomics exam will not be a walk in the park. In fact, you will have to have a firm understanding of macroeconomics terms and know how to connect them together, know how to draw and analyze several different types of economics graphs, and be able to answer complex word problems in both multiple-choice and free-response formats. It's easy to get overwhelmed and frustrated, especially when you're in the midst of preparing for the exam. However, if you learn the material, gain a deeper understanding of it, and know how to apply this knowledge to different situations, you will be ready to conquer the AP Macro exam. If you keep in mind these 40 tips when studying and taking the exam, and put in the hard work, you are set to earn that coveted score of 5!

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