UNIT 6

10–13% AP EXAM WEIGHTING

~5–7 CLASS PERIODS

Open Economy—International Trade and Finance

BIG IDEA 1
Economic Measurements **MEA**

- Why does the balance of payments balance?

BIG IDEA 2
Markets **MKT**

- Why does the price of one nation's currency relative to another nation's currency change?
- How do changes in the value of a country's currency affect that country's economy?

Developing Understanding

Unit 6 introduces students to the concept of an open economy in which a country interacts with the rest of the world through both product and financial markets. This unit is often challenging for students because economic activity between nations must be facilitated by currency exchange, which introduces another market to be considered when analyzing macroeconomic situations.

Changes in economic activity affect the supply of and demand for a nation's currency and subsequently the value of that currency. But it is also true that changes in the value of a country's currency can affect economic activity in that country. In addition to these insights, students have the opportunity in this unit to consider the effects of economic policy on exchange rates and the implications of such changes.

Building Course Skills

1.A 1.C 3.A 3.B 4.A 4.C

In this unit, students will be asked to not only demonstrate a robust understanding of economic principles but also show that they know how to interpret and manipulate economic models in the context of an open economy. They need to synthesize the concepts they have learned throughout the course to explain changes in net exports, financial capital flows, and policy actions in the foreign exchange market, and demonstrate this understanding via graphical representations.

Students often struggle to make the necessary connections between concepts in this unit, so provide them with guided opportunities to practice describing chains of cause and effect verbally and graphically. It is important that students take care to include each step along the way and describe it in enough detail to clarify the reason for the subsequent change. This will help ensure that they actually understand and can explain the connection between macroeconomic variables and the international movement of goods, services, and financial capital.

Preparing for the AP Exam

When taking the AP Exam, students commonly struggle to properly represent the foreign exchange market graphically and predict and explain the effects of changes in this market. It often helps to approach the teaching of the foreign exchange market as another application of the basic supply and demand model—when one nation demands another's currency, the other nation must be willing to supply its own currency to trade, and this interaction determines the equilibrium price, or exchange rate. Be sure to spend sufficient time in class modeling how to graph the foreign exchange market with appropriately labeled curves and axes so students don't needlessly lose points on the exam. When labeling the vertical axis, emphasize that the exchange rate is expressed in terms of one unit of the domestic currency.

UNIT AT A GLANCE

Enduring Understanding	Topic	Suggested Skills	Class Periods ~5–7 CLASS PERIODS
MEA-4	**6.1 Balance of Payments Accounts**	1.A Describe economic concepts, principles, or models.	
MKT-5	**6.2 Exchange Rates**	1.C Identify an economic concept, principle, or model using quantitative data or calculations.	
	6.3 The Foreign Exchange Market	4.A Draw an accurately labeled graph or visual to represent an economic model or market.	
	6.4 Effect of Changes in Policies and Economic Conditions on the Foreign Exchange Market	4.C Demonstrate the effect of a change in an economic situation on an accurately labeled graph or visual.	
	6.5 Changes in the Foreign Exchange Market and Net Exports	3.A Determine the outcome of an economic situation using economic concepts, principles, or models.	
	6.6 Real Interest Rates and International Capital Flows	3.B Determine the effect(s) of one or more changes on other economic markets.	

Go to **AP Classroom** to assign the **Personal Progress Check** for Unit 6.
Review the results in class to identify and address any student misunderstandings.

SAMPLE INSTRUCTIONAL ACTIVITIES

The sample activities on this page are optional and offered to provide possible ways to incorporate various instructional approaches into the classroom. Teachers do not need to use these activities or instructional approaches and are free to alter or edit them. The examples below were developed in partnership with teachers from the AP community to share ways that they approach teaching some of the topics in this unit. Please refer to the Instructional Approaches section beginning on p. 113 for more examples of activities and strategies.

Activity	Topic	Sample Activity
1	6.3, 6.4	**Simulation and Debriefing** Carry out a classroom simulation to demonstrate how the value of a currency in the foreign exchange market is established and how economic conditions influence the value of the currency. Distribute pretend foreign currency to students and explain that they will need to exchange their money for domestic currency in order to purchase a domestic good (e.g., a candy bar). Carry out an auction for the domestic currency while recording the data. Then change the scenario (e.g., distribute more money as a result of improved employment conditions). Debrief the experience with students to ensure that connections are made to the concepts being studied.
2	6.4	**Think-Pair-Share** Use the problem set on teaching foreign exchange in the **Mastering Economic Thinking Skills** module. The problem set provides eight scenarios (p. 42) that will result in an appreciation or depreciation of the value of a currency. Pair students and provide each pair with one of the eight scenarios. Allow time for students to first individually draw graphs indicating the effects of the situation on the foreign exchange market, using both the dollar and the euro market. Then they should clearly indicate the effect on the exchange rate. Have students share their responses with their partners. Once they come to a consensus, have a representative from each of the eight scenarios go to the board to graph and explain the effects to the class.
3	6.5	**Activating Prior Knowledge** After drawing correctly labeled graphs of a given currency and manipulating exchange rates based on a change in market conditions, challenge students to determine a subsequent change in net exports based on the exchange rate change shown on their graph. Students will connect this to a change in aggregate demand (which they were first introduced to in Unit 3), ultimately resulting in a change in output, price level, and unemployment.

Unit Planning Notes

Use the space below to plan your approach to the unit. Consider how you want to pace your course and methods of instruction and assessment.

SUGGESTED SKILL

Principles and Models

1.A

Describe economic concepts, principles, or models.

AVAILABLE RESOURCE

- External Resource > **Davidson Next AP Macroeconomics Course—Foreign Exchange Markets**
- Classroom Resources > **Balance of Payments**

TOPIC 6.1

Balance of Payments Accounts

Required Course Content

ENDURING UNDERSTANDING

MEA-4

Foreign trade accounting measures the flow of goods, services, and financial capital between countries.

LEARNING OBJECTIVE

MEA-4.A

a. Define the current account (CA), the capital and financial account (CFA), and the balance of payments (BOP).

b. Explain how changes in the components of the CA and CFA affect a country's BOP.

c. Calculate the CA, the CFA, and the BOP.

ESSENTIAL KNOWLEDGE

MEA-4.A.1

The current account (CA) records net exports, net income from abroad, and net unilateral transfers.

MEA-4.A.2

The CA is not always balanced; it may show a surplus or a deficit. A nation's balance of trade (i.e., net exports) is part of the current account and may also show a surplus or a deficit.

MEA-4.A.3

The capital and financial account (CFA) records financial capital transfers and purchases and sales of assets between countries.

MEA-4.A.4

The CFA is not always balanced; it may show a surplus (financial capital inflow) or a deficit (financial capital outflow).

MEA-4.A.5

The balance of payments (BOP) is an accounting system that records a country's international transactions for a particular time period. It consists of the CA and the CFA.

MEA-4.A.6

Any transaction that causes money to flow into a country is a credit to its BOP account, and any transaction that causes money to flow out is a debit. The sum of all credit entries should match the sum of all debit entries (CA+CFA=0).

TOPIC 6.2

Exchange Rates

SUGGESTED SKILL

Principles and Models

1.C

Identify an economic concept, principle, or model using quantitative data or calculations.

AVAILABLE RESOURCES

- External Resource > **Davidson Next AP Macroeconomics Course—Foreign Exchange Markets**
- Classroom Resources > **Mastering Economic Thinking Skills – *Focusing on the Phillips Curve and Exchange Rates in Macroeconomics and Teaching About Foreign Exchange***

Required Course Content

ENDURING UNDERSTANDING

MKT-5

The interaction of buyers and sellers exchanging the currency of one country for the currency of another determines the equilibrium exchange rate in a flexible exchange market and influences the flow of goods, services, and financial capital between countries.

LEARNING OBJECTIVE

MKT-5.A

a. Define the exchange rate, currency appreciation, and currency depreciation.

b. Explain how currencies are valued relative to one another.

c. Calculate the value of one currency relative to another.

ESSENTIAL KNOWLEDGE

MKT-5.A.1

In the foreign exchange market, one currency is exchanged for another; the price of one currency in terms of the other is the exchange rate.

MKT-5.A.2

If one currency becomes more valuable in terms of the other, it is said to appreciate. If one currency becomes less valuable in terms of the other, it is said to depreciate.

SUGGESTED SKILL

Graphing and Visuals

4.A

Draw an accurately labeled graph or visual to represent an economic model or market.

AVAILABLE RESOURCES

- External Resource > **Davidson Next AP Macroeconomics Course—Foreign Exchange Markets**
- Classroom Resources >
  - **Markets – *Foreign Exchange Markets***
  - **Mastering Economic Thinking Skills – *Focusing on the Phillips Curve and Exchange Rates in Macroeconomics and Teaching About Foreign Exchange***

TOPIC 6.3

The Foreign Exchange Market

Required Course Content

ENDURING UNDERSTANDING

MKT-5

The interaction of buyers and sellers exchanging the currency of one country for the currency of another determines the equilibrium exchange rate in a flexible exchange market and influences the flow of goods, services, and financial capital between countries.

LEARNING OBJECTIVE	ESSENTIAL KNOWLEDGE
MKT-5.B a. Define the foreign exchange market, demand for currency, and supply of currency. b. Explain (using graphs as appropriate) the relationship between the exchange rate and the quantity of currency demanded (supplied).	**MKT-5.B.1** The demand for a currency in a foreign exchange market arises from the demand for the country's goods, services, and financial assets and shows the inverse relationship between the exchange rate and the quantity demanded of a currency. **MKT-5.B.2** The supply of a currency in a foreign exchange market arises from making payments in other currencies and shows the positive relationship between the exchange rate and the quantity supplied of a currency.
MKT-5.C Define (using graphs as appropriate) the equilibrium exchange rate.	**MKT-5.C.1** In the foreign exchange market, equilibrium is achieved when the exchange rate is such that the quantities demanded and supplied of the currency are equal.

continued on next page

LEARNING OBJECTIVE

MKT-5.D

Explain (using graphs as appropriate) how exchange rates adjust to restore equilibrium in the foreign exchange market.

ESSENTIAL KNOWLEDGE

MKT-5.D.1

Disequilibrium exchange rates create surpluses and shortages in the foreign exchange market. Market forces drive exchange rates toward equilibrium.

SUGGESTED SKILL

Graphing and Visuals

4.C

Demonstrate the effect of a change in an economic situation on an accurately labeled graph or visual.

AVAILABLE RESOURCES

- External Resource > **Davidson Next AP Macroeconomics Course—Foreign Exchange Markets**
- Classroom Resources >
  - **Markets – Foreign Exchange Markets**
  - **Mastering Economic Thinking Skills – *Focusing on the Phillips Curve and Exchange Rates in Macroeconomics and Teaching About Foreign Exchange***

TOPIC 6.4

Effect of Changes in Policies and Economic Conditions on the Foreign Exchange Market

Required Course Content

ENDURING UNDERSTANDING

MKT-5

The interaction of buyers and sellers exchanging the currency of one country for the currency of another determines the equilibrium exchange rate in a flexible exchange market and influences the flow of goods, services, and financial capital between countries.

LEARNING OBJECTIVE

MKT-5.E

a. Explain (using graphs as appropriate) the determinants of currency demand and supply.

b. Explain (using graphs as appropriate) how changes in demand and supply in the foreign exchange market affect the equilibrium exchange rate.

ESSENTIAL KNOWLEDGE

MKT-5.E.1

Factors that shift the demand for a currency (such as the demand for that country's goods, services, or assets) and the supply of a currency (such as tariffs or quotas on the other country's goods and services) change the equilibrium exchange rate.

MKT-5.E.2

Fiscal policy can influence aggregate demand, real output, the price level, and exchange rates.

MKT-5.E.3

Monetary policy can influence aggregate demand, real output, the price level, and interest rates, and thereby affect exchange rates.

TOPIC 6.5

Changes in the Foreign Exchange Market and Net Exports

SUGGESTED SKILL

Manipulation

3.A

Determine the outcome of an economic situation using economic concepts, principles, or models.

AVAILABLE RESOURCES

- External Resource > **Davidson Next AP Macroeconomics Course—Foreign Exchange Markets**
- Classroom Resources > **Mastering Economic Thinking Skills – *Focusing on the Phillips Curve and Exchange Rates in Macroeconomics* and *Teaching About Foreign Exchange***

Required Course Content

ENDURING UNDERSTANDING

MKT-5

The interaction of buyers and sellers exchanging the currency of one country for the currency of another determines the equilibrium exchange rate in a flexible exchange market and influences the flow of goods, services, and financial capital between countries.

LEARNING OBJECTIVE

MKT-5.F

Explain (using graphs as appropriate) how changes in the value of a currency can lead to changes in a country's net exports and aggregate demand.

ESSENTIAL KNOWLEDGE

MKT-5.F.1

Factors that cause a currency to appreciate cause that country's exports to decrease and its imports to increase. As a result, net exports will decrease.

MKT-5.F.2

Factors that cause a currency to depreciate cause that country's exports to increase and its imports to decrease. As a result, net exports will increase. [See EK MOD-2.A.3 and EK MOD-2.H.1 for explanations of the effect of changes in net exports on aggregate demand and the resulting effects on output, employment, and the price level.]

SUGGESTED SKILL

Manipulation

3.B

Determine the effect(s) of one or more changes on other economic markets.

AVAILABLE RESOURCES

- External Resource > **Davidson Next AP Macroeconomics Course—Foreign Exchange Markets**
- Classroom Resources > **Mastering Economic Thinking Skills – *Focusing on the Phillips Curve and Exchange Rates in Macroeconomics* and *Teaching About Foreign Exchange***

TOPIC 6.6

Real Interest Rates and International Capital Flows

Required Course Content

ENDURING UNDERSTANDING

MKT-5

The interaction of buyers and sellers exchanging the currency of one country for the currency of another determines the equilibrium exchange rate in a flexible exchange market and influences the flow of goods, services, and financial capital between countries.

LEARNING OBJECTIVE

MKT-5.G

Explain (using graphs as appropriate) how differences in real interest rates across countries affect financial capital flows, foreign exchange markets, and loanable funds markets.

ESSENTIAL KNOWLEDGE

MKT-5.G.1

In an open economy, differences in real interest rates across countries change the relative values of domestic and foreign assets. Financial capital will flow toward the country with the relatively higher interest rate. [See EK MKT-4.E.2 and EK MEA-4.A.6 for explanations of the impact on the loanable funds market and on net exports.]

MKT-5.G.2

Central banks can influence the domestic interest rate in the short run, which in turn will affect net capital inflows.