

# Chapter-16

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## **The Price Adjustment Mechanism with Flexible and Fixed Exchange Rates**

# OUTLINE

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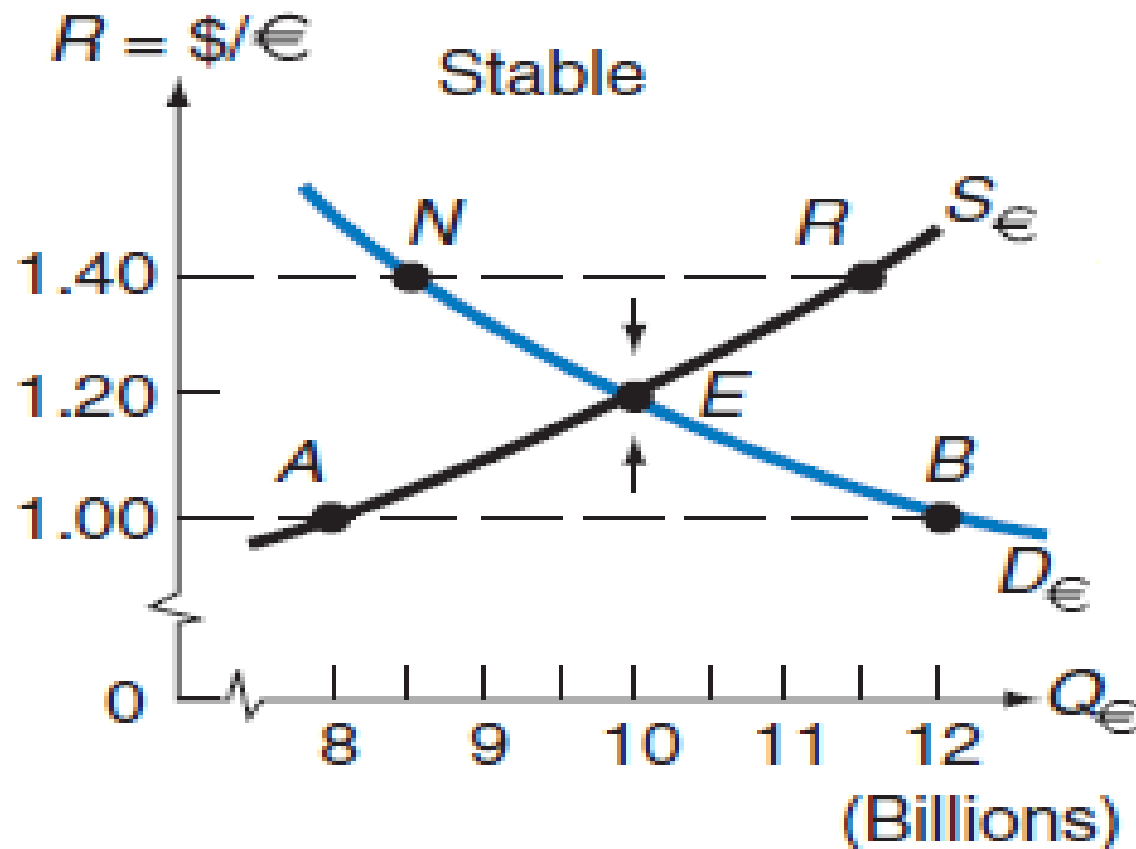
16.1 Introduction

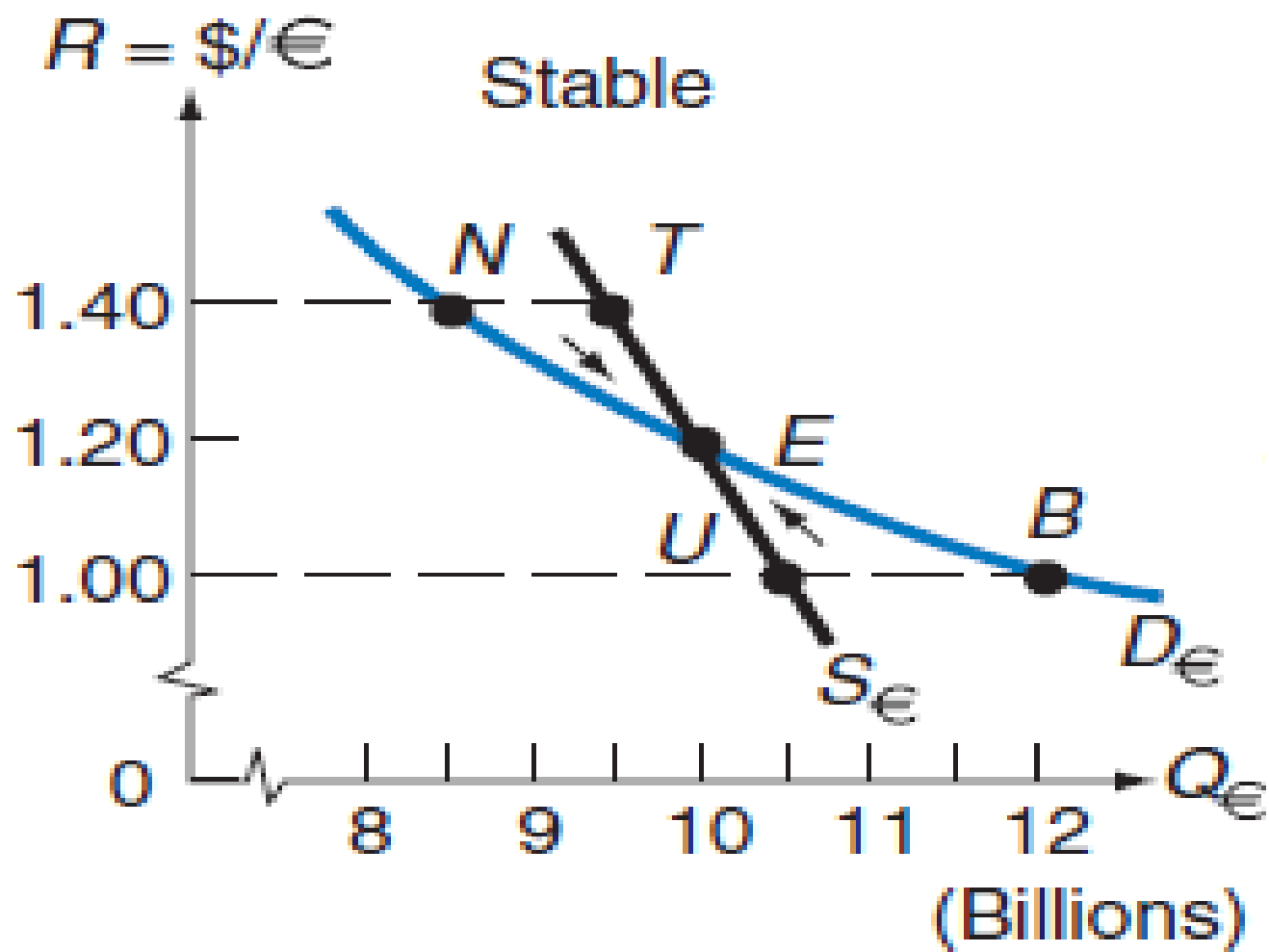
16.4 Stability of Foreign Exchange Markets

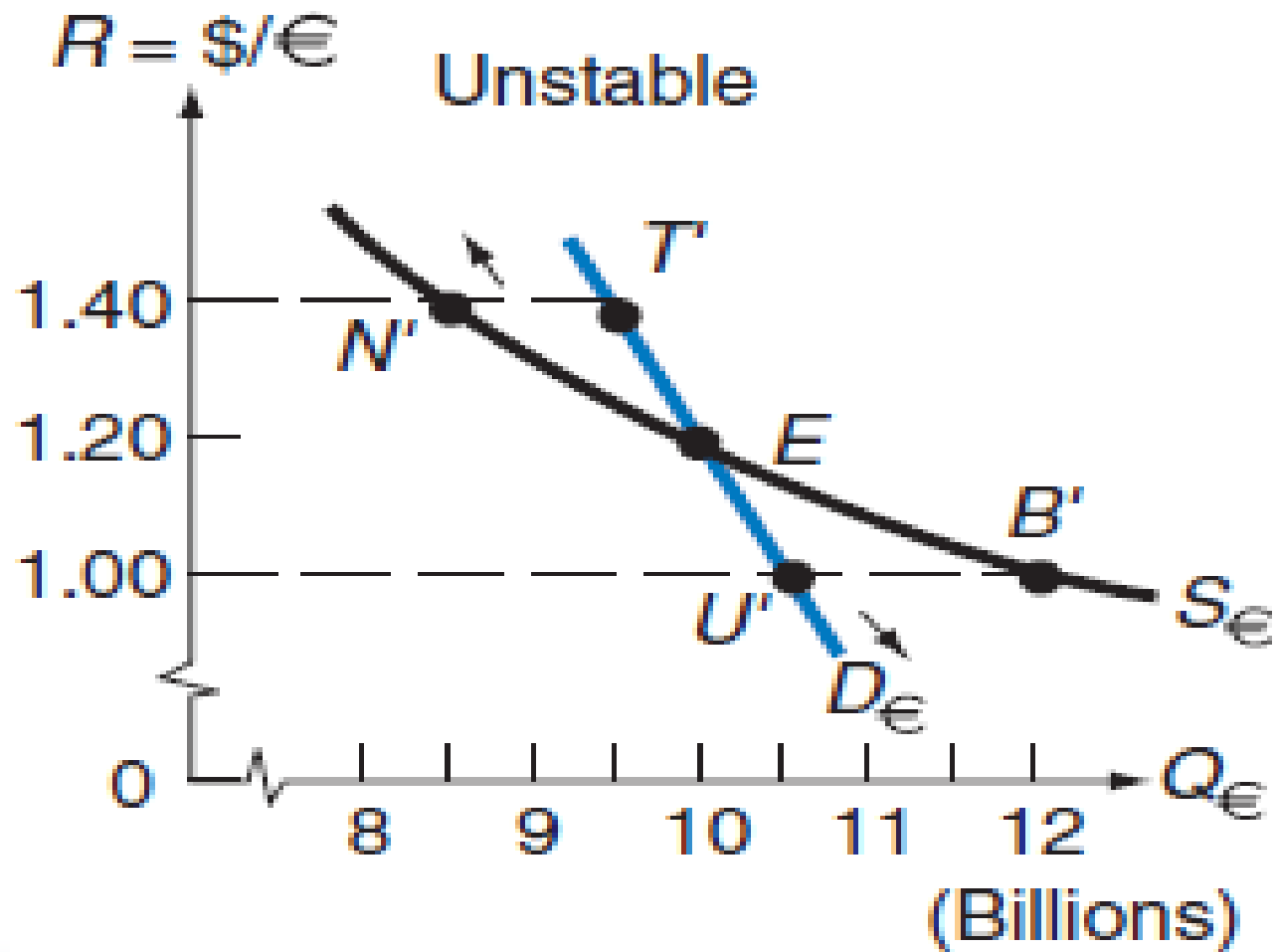
16.5 Elasticities in the Real World

# Stability of Foreign Exchange Markets

## 16.4A: Stable and Unstable Foreign Exchange Markets









# 16.4B The Marshall–Lerner Condition

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- If we knew the exact shape of the demand and supply curves of foreign exchange in the real world, it would be rather easy to determine whether the foreign exchange market in a particular case was stable or unstable
- If FOREX market is stable, the size of the depreciation or devaluation required to correct a deficit in the balance of payments
- **Unfortunately, this is not the case**

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- Whether the foreign exchange market is stable or unstable
  - The elasticity of the demand and supply of foreign exchange
  - We can only infer these from the demand for and supply of the nation's imports and exports.



# Marshall–Lerner condition

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- The **Marshall–Lerner condition** is the condition that tells us whether the foreign exchange market is stable or unstable
- This is valid when the supply curves of imports and exports (i.e.,  $SM$  and  $SX$  ) are both infinitely elastic, or horizontal
- Why we need to know the stability of FOREX markets?

- **Marshall–Lerner condition** indicates a stable foreign exchange market if the sum of the price elasticities of the demand for imports ( $DM$ ) and the demand for exports ( $DX$ ), in absolute terms, is greater than 1
- If the sum of the price elasticities of  $DM$  and  $DX$  is less than 1, the foreign exchange market is unstable,
- If the sum of these two demand elasticities is equal to 1, a change in the exchange rate will leave the balance of payments unchanged.

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- The greater the amount by which the sum of these two elasticities exceeds 1, the greater is the improvement in the balance of payments for a given depreciation or devaluation of the domestic currency

# 16.5 Elasticities in the Real World

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## 16.5A Elasticity Estimates

- The Marshall–Lerner condition postulates a stable foreign exchange market if the sum of the price elasticities of the demand for imports and the demand for exports exceeds 1 in absolute value.
- The sum of these two elasticities will have to be substantially greater than 1 for the nation's demand and supply curves of foreign exchange to be sufficiently elastic to make a depreciation or devaluation feasible (i.e., not excessively inflationary) as a method of correcting a deficit in the nation's balance of payments.

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- Before World War II, it was widely believed not only that the foreign exchange market was stable but that the demand for and the supply of foreign exchange were very elastic.
  - Other studies reached similar conclusions, confirming that the sum of the elasticities of the demand for imports and the demand for exports was either below or very close to 1 in absolute value.
  - Thus, the **Prewar Elasticity Optimism** was replaced by **Postwar Elasticity Pessimism**.

## 16.5B The J-Curve Effect

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- Not only are short-run elasticities in international trade likely to be much smaller than long-run elasticities,
- but a nation's trade balance may actually worsen soon after a devaluation or depreciation, before improving later on.

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- This is due to the tendency of the domestic-currency price of imports to rise faster than export prices soon after the devaluation or depreciation, with quantities initially not changing very much.
  - Over time, the quantity of exports rises and the quantity of imports falls, and export prices catch up with import prices, so that the initial deterioration in the nation's trade balance is halted and then reversed.

# The J-Curve

