Chapter 5

Saving and Investment in the Open Economy

Introduction

- In this presentation we cover:
  - Balance of payments accounting
  - The goods market equilibrium condition for an open economy

Balance of Payments Accounts

- The balance of payments accounts keep track of the economic activity that involves transactions across country borders
  - The Current Account
  - The Capital and Financial Account

The Current Account

- The current account describes:
  - Net exports
  - Net income from abroad
  - Net unilateral transfers

The Current Account

Current Account				
Net exports of goods and services (*NX*)			**−435.5**	
Exports of goods and services		971.9		
Goods	682.6			
Services	289.3			
Imports of goods and services		−1407.4		
Goods	−1166.9			
Services	−240.5			
Net income from abroad (*NFP*)			**−11.9**	
Income receipts from abroad		244.6		
Income payments to residents of other countries		−256.5		
Net unilateral transfers			**−56.0**	
Current Account Balance (*CA*)				**−503.4**

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The Capital and Financial Account

- The capital and financial account describes transactions involving asset exchange
  - The capital account
  - The financial account
- Jargon change: Before 1999, the term capital account referred to everything now included in the capital and financial accounts combined
  - Currently, the term capital account refers to a very small and unimportant item

The Capital Account

Capital and Financial Account				
Capital Account				
Net capital account transactions			0.7	
Financial Account				
Net financial flows			**474.2**	
Increase in U.S.-owned assets abroad (financial outflow)		−156.2		
U.S. official reserve assets	−3.7			
Other foreign assets	−152.5			
Increase in foreign-owned assets in U.S. (financial inflow)		630.4		
Foreign official assets	96.6			
Other foreign assets	533.7			
Capital and Financial Account Balance (*KFA*)				**474.9**
Statistical Discrepancy				**28.5**
Memoranda:				
Balance on goods and services (trade balance) =				**−435.5**
Balance on goods, services, and income =				**−447.4**
Official settlements balance =				
Balance of payments =				
Increase in U.S. official reserve assets minus increase in foreign official assets = 3.7 − 96.6 =				**−92.9**

Note: Numbers may not add to totals shown due to rounding.
Source: "U.S. International Transactions Accounts, Fourth Quarter and Year 2002," Table A, p. 18, *Survey of Current Business*, April 2003.

10

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11

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12

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13

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14

Balance

- The sum of the current account balance and the capital account balance must be zero

$$CA + KFA = 0$$

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17

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18

Why Should the Accounts Balance?

- Suppose that I purchase a TV made in China, sending $500 to China in exchange for the TV. What happens?
  - The effect on the current account balance is -$500 (net exports)
- What other accounts are affected?

What Happens?

- What happens if
  - The Chinese recipient of my payment buys a drug made in the U.S. for $500
  - The Chinese recipient of my payment buys a U.S. bond for $500
  - The Chinese recipient of my payment buys a $500 share in a U.S. real estate project
  - The Chinese recipient of my payment keeps the $500
  - The Chinese recipient of my payment exchanges the $500 for yuan at the Chinese central bank, who then uses it to buy $500 of U.S. government bonds
  - The Chinese recipient of my payment exchanges the $500 for yuan at the Chinese central bank; the Chinese central bank then sends the dollars to U.S. Federal Reserve to get yuan

Some Identities

- Recall some identities from Chapter 2:

$$Y = C + I + G + NX$$

$$S = Y + NFP - C - G$$

Plugging the expression for *Y* in the first equation into the second yields:

$$S = I + NX + NFP$$

Goods Market Equilibrium

- If we replace actual values (for consumption, saving, and investment) with *desired* values, the equation becomes the goods market equilibrium condition:

$$S^d = I^d + NX + NFP$$

Assume *NFP* is Zero

- For the U.S., NFP is always very close to zero, so we will ignore it, leaving us with this equilibrium condition:

$$S^d = I^d + NX$$

or

$$S^d - I^d = NX$$

or

$$Y = C^d + I^d + G + NX$$

What's Next?

- With a revised goods market equilibrium condition, we are (almost) ready to revise the derivation of IS for the open economy context
  - We will still need to consider what determines *NX*
- The supply side and money market segments of our model are unchanged when we go to the open economy model
- So with IS revised, we will be able to use the model we have early derived in an open economy setting

The End