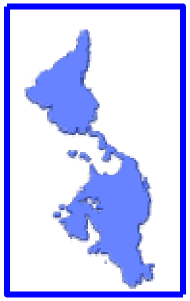


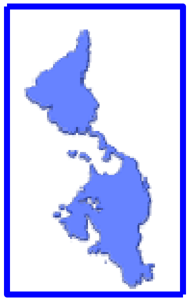
National Income Accounting and the Balance of Payments

Graciela L. Kaminsky

Department of Economics

George Washington University

Lecture Notes



Questions

- **The US current account deficit is about 7 percent of GDP. What are the determinants of the trade imbalance?**

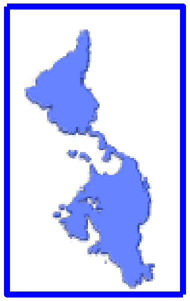
- **Is there any relationship between the US government deficit and the trade imbalance?**

- **Inflation pressure in China and balance of payments surplus. Any connection?**

National Income Accounts

- **Gross National Product:** **The value of all final goods and services produced by its factors of production and sold on the market in a given time period.**
- **In the case of the closed economy,**
  - **Consumption:** **The amount consumed by private domestic residents**
  - **Investment:** **The amount put aside by private firms to build new plant and equipment for future production.**
  - **Government Purchases:** **the amount used by the government**

$$1.\quad Y = C + I + G$$



GNP, NNP, NI

- GNP does not take into account the economic loss due to the tendency of machinery and structures to wear out as they are used. This loss, called depreciation, reduces the income of capital owners

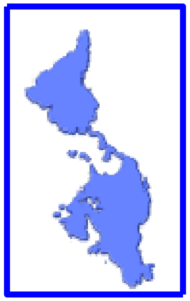
2. NNP = GNP – Depreciation

- Every dollar used to purchase goods or services automatically ends up in somebody's pocket as salaries, dividends, that is why there is a connection between product (output) and income.

3. NI = NNP + Unilateral Transfers – Indirect Business Taxes

    - **Unilateral Transfers:** Gifts from residents of foreign countries (Reparation payments, pension payments to retired citizens living abroad, foreign aid, such as relief funds from other countries to the US following Hurricane Katrina).

    - **Producer and Consumer Prices:** NI is valued at producer prices, GNP is valued at consumer prices. The difference is indirect taxes.



GNP and GDP

- **GDP: measures the output produced within the country's borders.**
- **GNP: measures the output produced by factors owned by domestic residents.**

4. GNP = GDP + Net Receipts of factor income from the rest of the world

- **These Net Receipts are primarily the income domestic residents earn on wealth they hold in other countries less the payments domestic residents make to foreign owners of wealth that is located in the domestic country.**

National Income Accounting for an Open Economy

$$5.\quad Y = C + I + G + X - IM$$

$$6.\quad CA = X - IM$$

- **CA is the Current Account. When exports exceed imports, we say the country has a current account surplus. A country has a current account deficit when imports exceed exports.**

Current Account

- Using 5. and 6. we can rewrite the Current Account as:

7. CA = Y – (C + I + G) = Y - E

- A CA deficit indicates that spending is larger than output.
- We can also rewrite 7. as follows:

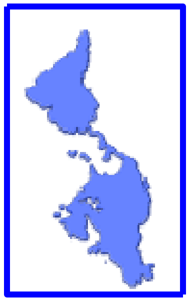
7. CA = Y – T – (C + I + G – T)

8. SP = (Y – T) – C = Private Savings

9. Gov. Budget Deficit = G – T = GBD

7. CA = SP - GBD – I

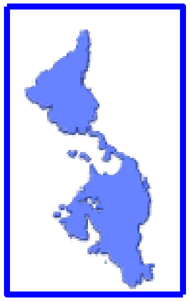
- If Private Savings and Investment do not change much, the current account deficit will increase with the government budget deficit: The Twin Deficits.
- Examples: President Reagan fiscal policy in the early 1980s and President Bush fiscal policy in the early 2000s. In both cases, taxes were lowered and government expenditure increased, generating a large government deficit and a sharply increased current account deficit.



Balance of Payments Accounts

- A country's balance of payments accounts keep track of both its payments to and its receipts from foreigners. In other words, only transactions between residents of one country with residents of another country are recorded in the Balance of Payments.

- Transactions in goods and services (such as, exports of wine, imports of computers) and in assets (such as, Microsoft shares, U.S. Treasury Bills, British Bonds) are recorded in the Balance of Payments



Balance of Payments Transactions

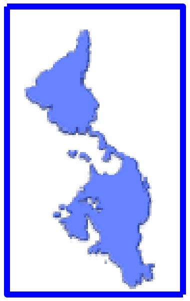
- **Transactions in goods and services are recorded in the Current Account of the Balance of Payments.**

- **Transactions in assets are recorded in the Financial Account of the Balance of Payments.**

- **Certain other activities resulting in transfers of wealth between countries are recorded in the Capital Account of the Balance of Payments.**

- **Any transaction resulting in a payment to foreigners is entered in the balance of payments accounts as a debit and is given a negative (-) sign.**

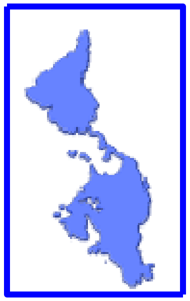
- **Any transaction resulting in a receipt from foreigners is entered as a credit and is given a positive (+) sign.**



Double-Entry Bookkeeping

- **Double-entry bookkeeping: Every international transaction automatically enters the balance of payments twice, once as a credit and once as a debit.**

- **This principle of balance of payments accounting holds true because every transaction has two sides: if you buy something from a foreigner you must pay him in some way, and the foreigner must then somehow spend or store your payment.**

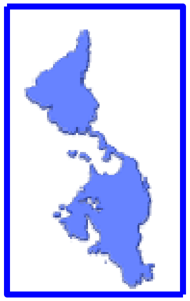


Example 1

- **A German investor purchases Dell shares from an American Investor for $100,000.00. The German investor pays by writing a check on his account in a U.S. bank.**

- **The sale of the Dell shares by an American investor is recorded as a credit in the financial account of the United States.**

- **The American investor receives a check from the German investor: is recorded as a debit in the Financial Account of the United States (the American resident acquires an asset).**

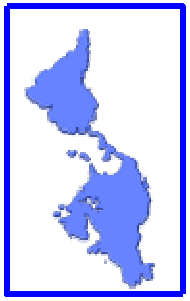


Example 2

- **An Argentine tourist travels to New York city. He stays in a hotel for four nights and spends $800.00. He pays with a traveler check on an American Bank.**

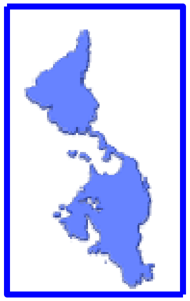
- **The hotel lodging services are recorded as a credit in the current account of the United States.**

- **The hotel acquires an asset from a foreign resident (the traveler check): is recorded as a debit in the financial account of the United States.**



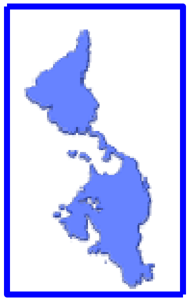
Example 3

- U.S. government sends military aid to Colombia.
- When the U.S. government sends military equipment to Colombia, it is recorded as an export of equipment in the current account of the United States. It is a credit.
- The U.S. government does not receive any payment from Colombia (military aid). It is then recorded as a Transfer in the Current Account (debit).



Example 4

- **The US government forgives $1 billion in debt owed to it by the government of Bolivia.**
- **There is a $1 billion reduction in US assets held abroad, a net export and therefore a credit in the Financial Account.**
- **There is no payment for this “export” of assets. US wealth declines by $1 billion and a $1 billion debit is recorded in the Capital Account.**



Example 5: Official Reserve Transactions

- **An American auto dealer exports a car to Great Britain. He is paid with a check for 20,000 British Pounds. The auto dealer does not want to hold pounds. It gives the 20,000 pounds to the Federal Reserve who gives the dealer US dollars in return.**
- **The sale of the car is recorded as a credit in the US current account.**
- **The Central Bank purchase of British pounds (the Central Bank acquires a foreign asset) is recorded as a debit in the Financial Account of the United States.**
- **The holdings of foreign assets of the Federal Reserve have increased.**
- **This transaction is known as an Official Reserve Transaction.**

Official Reserve Transactions

- **When the Federal Reserve purchases British Pounds as in the previous example, it pays with US dollars.**
- **As a result, the amount of dollars held by the private sector increases. The US money supply has increased.**
- **All purchases and sales of foreign assets by a central bank affect the money supply in the country.**

Official Settlements Balance or BOP

- **Remember Double-entry bookkeeping: Every international transaction automatically enters the balance of payments twice, once as a credit and once as a debit. Thus, the sum of all transactions should be equal to zero.**

- **The sum of the current account balance, the capital account balance, the non-reserve portion of the financial account, and the statistical discrepancy is known informally as the Balance of Payments. This sum does not include the transactions of the central bank and it can be positive or negative.**

- **A surplus in the Balance of Payments implies that the Central Bank accumulates foreign assets.**

- **A deficit in the Balance of Payments implies that the Central Bank sells foreign assets.**

Money Supply: A Primer

Central Bank Balance Sheet

Assets	Liabilities
Foreign Assets	Money Supply (money base)
Domestic Assets	

Domestic Assets: Domestic Government Bonds

Foreign Assets: Foreign Currencies, Foreign Bonds

Purchase/Sale of Domestic Assets: Open Market Operations

Purchase/Sale of Foreign Assets: Foreign Exchange Intervention