

Negotiations and International Organizations

Introduction to Capital Flows

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The National Income Accounts – I

- Records the value of **national income** that results from production and expenditure.
 - ▶ Producers earn income from buyers who spend money on goods and services.
 - ▶ The amount of expenditure by buyers = the amount of income for sellers = the value of production.
 - ▶ National income is often defined to be the income earned by a nation's factors of production.
- **Gross national product (GNP)** is the value of all final goods and services produced by a nation's factors of production in a given time period.

Negotiations and International Organizations

Outline of This Lecture

- National income accounts
 - ▶ measures of national income
 - ▶ measures of value of production
 - ▶ measures of value of expenditure
- National saving, investment, and the current account
- Balance of payments accounts

The National Income Accounts – II

- ▶ What are factors of production? Factors that are used to produce goods and services: workers (labor services), physical capital (like buildings and equipment), natural resources and others.
- ▶ The value of final goods and services produced by US-owned factors of production are counted as US GNP.
- GNP is calculated by adding the value of expenditure on final goods and services produced:
 - 1 Consumption (*C*): expenditure by domestic consumers
 - 2 Investment (*I*): expenditure by firms on buildings & equipment
 - 3 Government purchases (*G*): expenditure by governments on goods and services
 - 4 Current account balance (*CA*) (exports (*EX*) minus imports (*IM*)): net expenditure by foreigners on domestic goods and services

The National Income Accounts – III

- *GNP* is one measure of national income, but a more precise measure of national income is *GNP* adjusted for following:
 - 1 **Depreciation** of physical capital results in a loss of income to capital owners, so the amount of depreciation is subtracted from *GNP*.
 - 2 **Unilateral transfers** to and from other countries can change national income: payments of expatriate workers sent to their home countries, foreign aid and pension payments sent to expatriate retirees.
- Another approximate measure of national income is gross domestic product (*GDP*):
 - ▶ Gross domestic product measures the final value of all goods and services that are produced within a country in a given time period.
 - ▶ $GDP = GNP - \text{payments from foreign countries for factors of production} + \text{payments to foreign countries for factors of production}$.

National Income Accounting for an Open Economy – II

- When production > domestic expenditure, exports > imports: current account > 0 and trade balance > 0
 - ▶ when a country exports more than it imports, it earns more income from exports than it spends on imports
 - ▶ net foreign wealth is increasing
- When production < domestic expenditure, exports < imports: current account < 0 and trade balance < 0
 - ▶ when a country exports less than it imports, it earns less income from exports than it spends on imports
 - ▶ net foreign wealth is decreasing

National Income Accounting for an Open Economy – I

- The national income identity for an open economy is

$$\begin{aligned}
 Y_{GNP} &= C + I + G + EX - IM \\
 &= \underbrace{C + I + G}_{\text{Expenditure by domestic individuals and institutions}} + \underbrace{CA}_{\text{Expenditure by foreign individuals and institutions}}
 \end{aligned}$$

- So

$$CA = EX - IM = Y_{GNP} - (C + I + G)$$

Saving and the Current Account

- National saving (*S*) = national income (*Y*) that is not spent on consumption (*C*) or government purchases (*G*).

$$S = Y - C - G$$

- An open economy can save by building up its capital stock or by acquiring foreign wealth.

$$S = I + CA.$$

Private and Government Saving

- **Private saving** is the part of disposable income (national income, Y , minus taxes, T) that is saved rather than consumed:

$$S_p = Y - T - C$$

- **Government saving** is net tax revenue, T , minus government purchases, G :

$$S_g = T - G.$$

- Private and government saving add up to national saving:

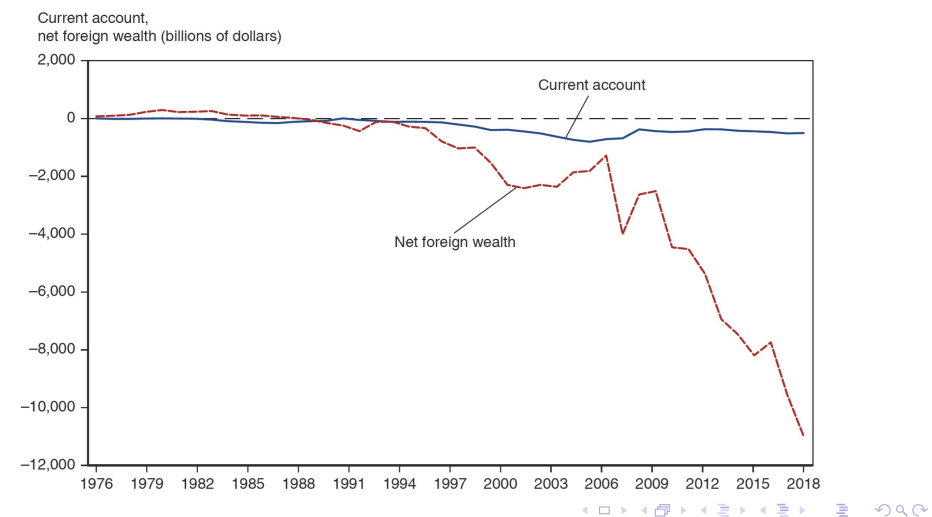
$$S = (Y - T - C) + (T - G) = S_p + S_g$$

Balance of Payments Accounts

- A country's balance of payments accounts accounts for its payments to and its receipts from foreigners.
- An international transaction involves two parties, and each transaction enters the accounts twice: once as a credit (+) and once as a debit (-).
- The balance of payments accounts are separated into 3 broad accounts:
 - ▶ **current account (CA)**: accounts for flows of goods and services (imports and exports).
 - ▶ **financial account (FA)**: accounts for flows of financial assets (financial capital).
 - ▶ **capital account (KA)**: flows of special categories of assets (capital): typically nonmarket, non-produced, or intangible assets like debt forgiveness, copyrights and trademarks.

Current Account and Net International Investment Position

Figure: The US Current Account and Net International Investment Position



Examples of Balance of Payments Accounting – I

- You import a fax machine from Olivetti.
- Olivetti deposits your check in a U.S. bank.

	Credit	Debit
Fax machine (current account, U.S. good import)		-\$1,000
Bank deposit (financial account, U.S. asset sale)	+\$1,000	

- You buy lunch in France and pay by credit card.
- French restaurant receives payment from your credit card company.

Examples of Balance of Payments Accounting – II

	Credit	Debit
Meal purchase (<i>current account, U.S. service import</i>)		−\$200
Sale of credit card claim (<i>financial account, U.S. asset sale</i>)	+\$200	

- You buy a share of BP.
- BP deposits the money in a U.S. bank.

	Credit	Debit
Stock purchase (<i>financial account, U.S. asset purchase</i>)		−\$95
Bank deposit (<i>financial account, U.S. asset sale</i>)	+\$95	

How Do the Balance of Payments Accounts Balance?

- Due to the double entry of each transaction, the balance of payments accounts will balance by the following equation:

$$CA + FA + KA = 0$$

Examples of Balance of Payments Accounting – III

- U.S. banks forgive a \$50mln debt owed by the government of Argentina through debt restructuring.
- U.S. banks who hold the debt thereby reduce the debt by crediting Argentina's bank accounts.

	Credit	Debit
Debt forgiveness (<i>capital account, U.S. transfer payment</i>)		–\$50mln
Reduction in bank’s claims (<i>financial account, U.S. asset sale</i>)	+\$50mln	

Balance of Payments Accounts – I

The 3 broad accounts are more finely divided:

- **Current account:** imports and exports
 - ① merchandise (goods like DVDs)
 - ② services (payments for legal services, shipping services, tourist meals, etc.)
 - ③ income receipts (interest and dividend payments, earnings of firms and workers operating in foreign countries)
- **Current account:** *net unilateral transfers*
 - ▶ gifts (transfers) across countries that do not purchase a good or service nor serve as income for goods and services produced
- **Capital account:** records special transfers of assets, but this is a minor account for the U.S. and most countries in the world including Greece

Balance of Payments Accounts – II

- **Financial account:** the difference between sales of domestic assets to foreigners and purchases of foreign assets by domestic citizens.
- **Financial inflow**
 - ▶ Foreigners loan to domestic citizens by buying domestic assets.
 - ▶ Domestic assets sold to foreigners are a credit (+) because the domestic economy acquires money during the transaction.
- **Financial outflow**
 - ▶ Domestic citizens loan to foreigners by buying foreign assets.
 - ▶ Foreign assets purchased by domestic citizens are a debit (–) because the domestic economy gives up money during the transaction.

Balance of Payments Accounts – IV

- **Official (international) reserve assets:** foreign assets held by central banks to cushion against financial instability.
 - ▶ Assets include government bonds, currency, gold, and accounts at the International Monetary Fund.
 - ▶ Official reserve assets owned by (sold to) foreign central banks are a credit (+) because the domestic central bank can spend more money to cushion against instability.
 - ▶ Official reserve assets owned by (purchased by) the domestic central bank are a debit (–) because the domestic central bank can spend less money to cushion against instability.

Balance of Payments Accounts – III

- **Financial account** has at least 3 subcategories:
 - 1 Official (international) reserve assets
 - 2 All other assets
 - 3 Statistical discrepancy
- **Statistical discrepancy**
 - ▶ Data from a transaction may come from different sources that differ in coverage, accuracy, and timing.
 - ▶ The balance of payments accounts therefore seldom balance in practice.
 - ▶ The statistical discrepancy is the account added to or subtracted from the financial account to make it balance with the current account and capital account.

Balance of Payments Accounts – V

- The negative value of the official reserve assets is called the **official settlements balance** or “balance of payments.”
 - ▶ It is the sum of the current account, the capital account, the nonreserve portion of the financial account, and the statistical discrepancy.
 - ▶ A negative official settlements balance may indicate that a country
 - is **depleting** its official international reserve assets, or
 - may be incurring **large debts to foreign central banks** so that the domestic central bank can spend a lot to protect against financial instability.

US Balance of Payments

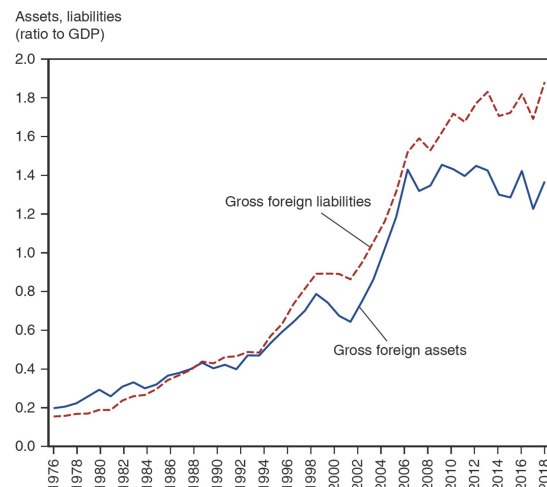
TABLE 13-2 U.S. Balance of Payments Accounts for 2019 (billions of dollars)	
Current Account	
(1) Exports and current transfer receipts	3,805.94
Of which:	
Goods	1,652.44
Services	875.83
Income receipts (primary income)	1,135.69
Current transfer receipts (secondary income)	141.98
(2) Imports and current transfer payments	4,286.16
Of which:	
Goods	2,516.77
Services	588.36
Income payments (primary income)	899.35
Current transfer payments (secondary income)	281.69
Balance on current account	-480.22
[(1) - (2)]	
Capital Account	
(3)	-6.24
Financial Account	
(4) Net U.S. acquisition of financial assets, excluding financial derivatives	440.75
Of which:	
Official reserve assets	4.66
Other assets	436.09
(5) Net U.S. incurrence of liabilities, excluding financial derivatives	797.96
Of which:	
Official reserve liabilities	61.63
Other liabilities	736.33
(6) Financial derivatives other than reserves, net	-38.34
Net financial flows	-395.54
[(4) - (5) + (6)]	
Statistical Discrepancy	90.92
[Net financial flows less sum of current and capital accounts]	
Source: U.S. Department of Commerce, Bureau of Economic Analysis, June 19, 2020, release. Totals may differ from sums because of rounding.	

US Balance of Payments Accounts – I

- The U.S. has the most negative net foreign wealth in the world, and so is therefore the world's largest debtor nation.
- Its current account deficit in 2012 was \$440 billion dollars, so that net foreign wealth continues to decrease.
- The value of foreign assets held by the U.S. has grown since 1980, but liabilities of the U.S. (debt held by foreigners) has grown faster.

US Balance of Payments Accounts – II

Figure: U.S. Gross Foreign Assets and Liabilities



US Balance of Payments Accounts – III

- About 70% of foreign assets held by the U.S. are denominated in foreign currencies and almost all of U.S. liabilities (debt) are denominated in dollars.
- Changes in the exchange rate influence value of net foreign wealth (gross foreign assets minus gross foreign liabilities).
 - ▶ Appreciation of the value of foreign currencies makes foreign assets held by the U.S. more valuable, but does not change the dollar value of dollar-denominated debt for the U.S.