

## Chapter 13

# National Income Accounting and the Balance of Payments

### Arithmetic of Global Imbalances

#### National income identity

- $Y = \text{"income"}$
- $Y = C + I + G + (X - M)$
- $Y = C + S + T$

If we combine these two ...

- $C + I + G + (X - M) = C + S + T$
- $I = S + (T - G) - (X - M)$

$S$  = Private saving = household saving + corporate saving  
 $T - G$  = Public saving = tax revenue - gov't spending  
 $-(X - M)$  = Foreign saving = - Current account

## Arithmetic of Global Imbalances

Current account = “Net saving”

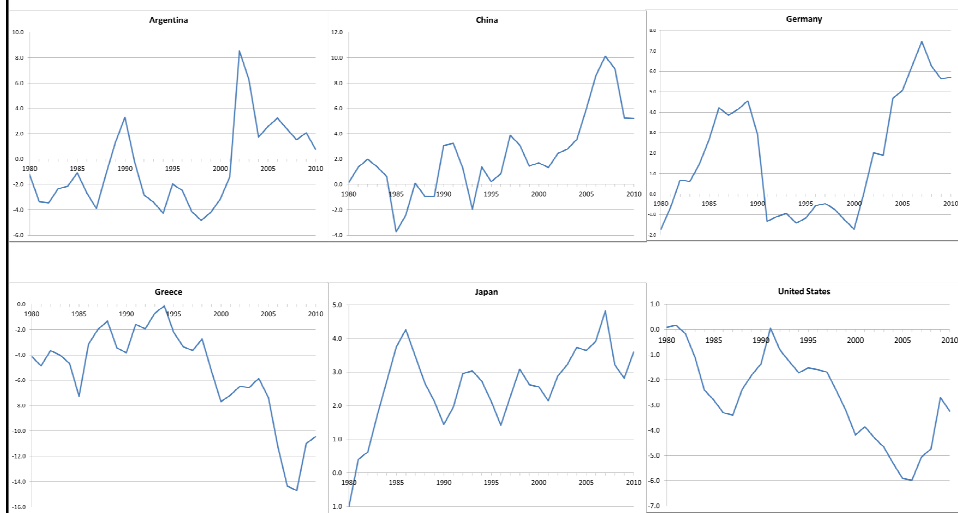
- $CA = (X - M) = (S - I) + (T - G)$

Private saving  
= Household saving  
+ Corporate saving

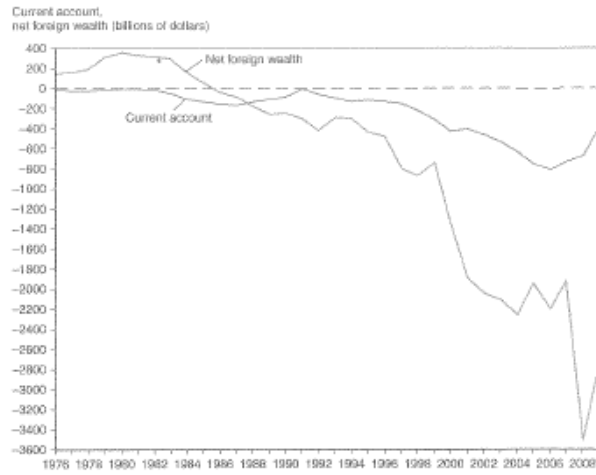
Budget balance  
= Public saving

- $CA = (X - M) = S^A - I$

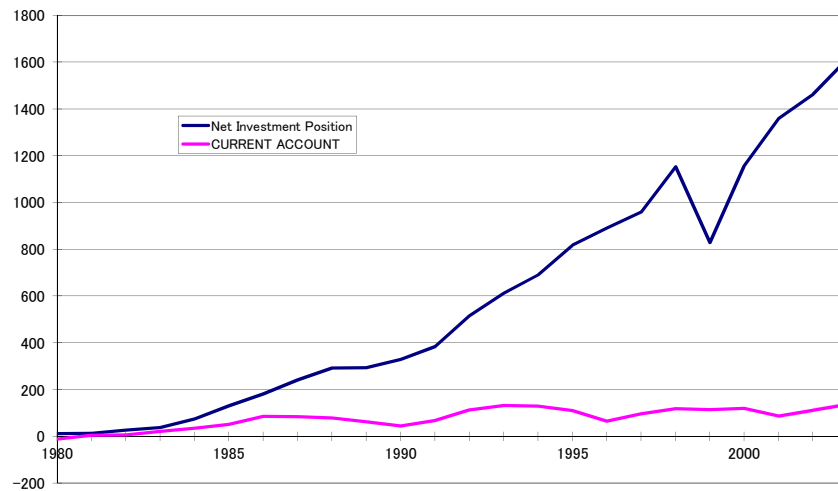
## Current Account Balances (as % of GDP)



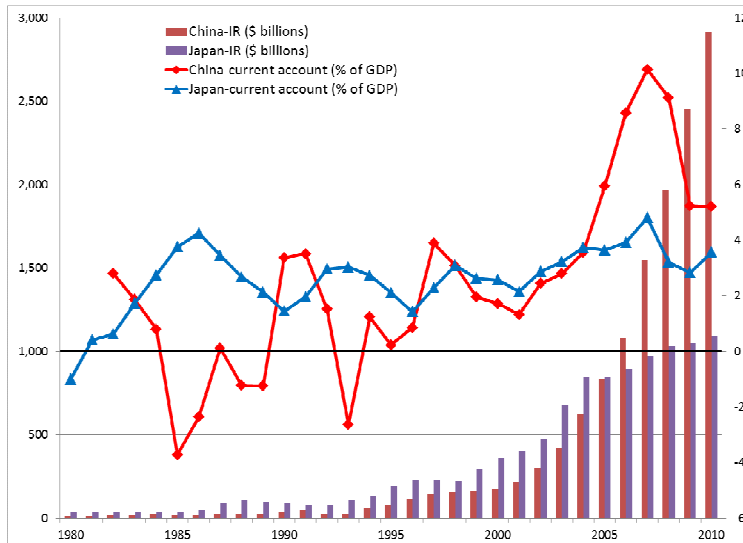
## The U.S. Current Account and Net Foreign Wealth Position, 1980 – 2008



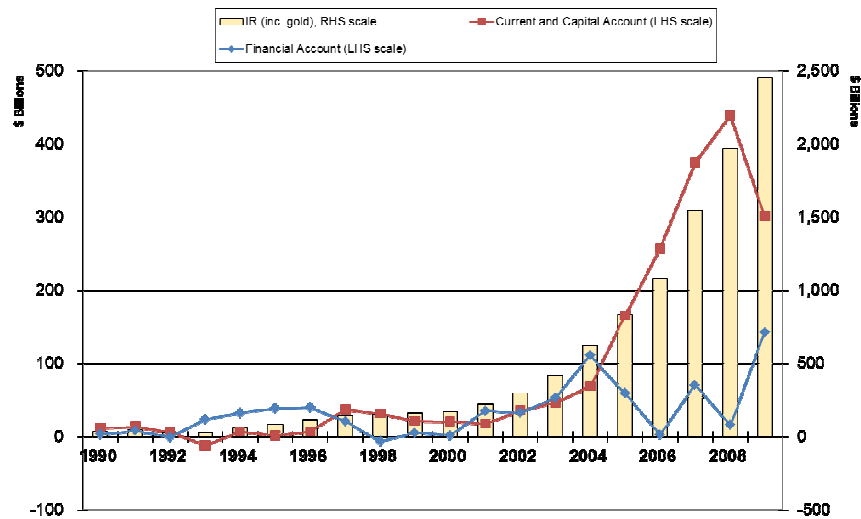
## Japan's Current Account and Net Foreign Wealth Position, 1980 – 2003



## CAB and IR Holdings of China and Japan, 1980 - 2010



## China's BoP



## The Balance of Payments Accounts

- A country's balance of payments accounts keep track of both its payments to and its receipts from foreigners.
- **Every international transaction automatically enters the balance of payments twice: once as a credit (+) and once as a debit (–).**

## The Balance of Payments Accounts

- Three types of international transactions are recorded in the balance of payments:
  - **Current Account:** Exports or imports of goods or services
  - **Financial Account (Capital Account):** Purchases or sales of **financial assets**
  - **Capital Account:** Transfers of wealth (i.e. financial assets) between countries

## Examples of Paired Transactions

**Case 1:** A U.S. citizen buys a \$1,000 fax machine from an Italian company, and pays for it with a \$1,000 check (which the Italian company eventually deposits in its account at Citibank in NY).

- That is, the U.S. trades assets for goods.
- This transaction creates the following two offsetting entries in the U.S. balance of payments:
  - It enters the U.S. *CA* with a **negative** sign (-\$1,000).
  - It shows up as a \$1,000 **credit** in the U.S. financial account.

**Case 2:** A U.S. citizen pays \$200 for dinner at a French restaurant in France by charging his Visa credit card.

- That is, the U.S. trades assets for services.
- This transaction creates the following two offsetting entries in the U.S. BoP:
  - It enters the U.S. *CA* with a negative sign (-\$200).
  - It shows up as a \$200 credit in the U.S. financial account.

**Case 3:** A U.S. citizen buys a \$95 newly issued share of stock in the United Kingdom oil giant British Petroleum (BP) by using a check drawn on his stockbroker money market account. BP deposits the \$95 in its own U.S. bank account at Second Bank of Chicago.

- That is, the U.S. trades assets for assets.
- This transaction creates the following two offsetting entries in the U.S. balance of payments:
  - It enters the U.S. financial account with a negative sign (-\$95).
  - It shows up as a \$95 credit in the U.S. financial account.

**Case 4:** A U.S. bank forgives \$5,000 in debt owed to it by the government of Bygonia.

- This transaction creates the following two offsetting entries in the U.S. balance of payments:
  - It enters the U.S. capital account with a negative sign (-\$5000).
  - It shows up as a \$5000 credit in the U.S. financial account.

## The Fundamental Balance of Payments Identity

- Any international transaction automatically gives rise to two offsetting entries in the balance of payments resulting in a fundamental identity:

$$\text{Current account} + \text{financial account} + \text{capital account} = 0$$

**Table 13-2:**  
U.S. Balance of Payments  
Accounts for 2009 (billions  
of dollars)

TABLE 2 U.S. Balance of Payments Accounts for 2009 (billions of dollars)	
<b>Current Account</b>	
(1) Exports	2,159.0
Of which:	
Goods	1,068.5
Services	502.3
Income receipts (primary income)	588.2
(2) Imports	2,412.5
Of which:	
Goods	1,575.4
Services	370.3
Income payments (primary income)	466.8
(3) Net unilateral transfers (secondary income)	-124.9
Balance on current account	-378.4
[(1) + (2) + (3)]	
<b>Capital Account</b>	
(4)	-0.1
<b>Financial Account</b>	
(5) Net U.S. acquisition of financial assets, excluding financial derivatives	140.5
Of which:	
Official reserve assets	52.3
Other assets	88.2
(6) Net U.S. incurrence of liabilities, excluding financial derivatives	305.7
Of which:	
Official reserve assets	450.0
Other assets	-144.3
(7) Financial derivatives, net	-50.8
Net financial flows	-216.0
[(5) - (6) + (7)]	*
Net errors and omissions	162.5
[Net financial flows less sum of current and capital accounts]	
<small>Source: U.S. Department of Commerce, Bureau of Economic Analysis, June 17, 2010, release. Totals may differ from sums because of rounding.</small>	