

## **Flow-of-Funds Account**

The flow-of-funds account describes financial flows in the economy.

Using the flow-of-funds account, one can study how saving finances investment.

The flow-of-funds account is complementary to the national income and product account.

## Sector Balance Sheet

Assets		Liabilities and Net Worth	
Money	$M$		
Financial Assets	$FA$	Financial Liabilities	$FL$
Real Assets	$RA$	Net Worth	$NW$

$$M + FA + RA = FL + NW$$

The balance sheet shows stocks at a moment of time.

Assets equal liabilities plus net worth. This relationship is an accounting identity, as net worth is defined as assets minus liabilities.

In the table, financial assets are all financial assets except money.

Real assets are buildings, machinery, automobiles, etc.

## Change in Sector Balance Sheet

$\Delta$ Assets

$\Delta$ Liabilities and Saving

$\Delta$ Money

$\Delta M$

$\Delta$ Financial Assets

$\Delta FA$

$\Delta$ Financial Liabilities

$\Delta FL$

Investment

$I$

Saving

$S$

$$\Delta M + \Delta FA + I = \Delta FL + S$$

A flow is the change in a stock, and one can understand the flow-of-funds account as showing the change in the balance sheet at two moments of time.

The account lists just the net flow. For example, the change in financial assets  $\Delta FA$  is the net flow—purchases less sales in the sector. From the account, one learns just the net flow, not the purchases and sales separately.

Capital gains are ignored.

## **Saving and Investment**

Saving is the change in the net worth, and investment is the change in real assets.

The account for a sector shows either how the excess of saving over investment finances investment in other sectors, or how the excess of investment over saving is financed by other sectors.

## Consumer Durables

In the flow-of-funds account, consumer durables (automobiles, televisions, etc.) are included as investment. This treatment is important, as this investment is commonly financed by borrowing, and one can use the flow-of-funds account to study this financing.

In the national income and product account, in contrast consumer durables are excluded from investment and are classified with consumption. The motive for this treatment is that the account is intended for analysis of production in the business sector, but not in the household sector.

The following table shows the flow-of-funds for a three-sector economy—households and firms, banks, and government.

Uses  $U$  are the asset flows, and sources  $S$  are the change in liabilities and net worth. The sources finance the uses.

Each magnitude is a flow.



## Flow-of-Funds

Households and Firms		Banks		Government		Economy	
U	S	U	S	U	S	U	S
S	$S$				$T - G$		$S + (T - G)$
I	$I$					$I$	
M	$\Delta M_{hf}$	$\Delta H$	$\Delta M_b$		$\Delta H$	$\Delta M_{hf} + \Delta H$	$\Delta M_b + \Delta H$
FA	$\Delta FA_{hf}$	$\Delta FA_b$				$\Delta FA$	
FL	$\Delta FL_{hf}$	$\Delta FL_b$		$\Delta FL_g$			$\Delta FL$
	Total = Total	Total = Total		Total = Total		Total = Total	

## Government

The flow-of-funds for the government shows how the government deficit  $G - T$  is financed, either by borrowing  $\Delta FL_g$  or by printing money  $\Delta H$ .

Here  $H$  stands for *high-powered money*, the money injected into the economy by the central bank.

## Banks

Money  $M$  (bank deposits) is a liability of banks, so for banks it is a source.

The banks keep the high-powered money  $H$  as reserves, so it is a use.

(For simplicity, the table supposes that the households and firms hold all their money as bank deposits, but none as cash.)

## Economy

For the entire economy, three accounting identities hold:

- saving equals investment;
- the change in financial assets equals the change in financial liabilities (for every debt there is an asset);
- the uses and sources of money are equal.

## **Intersector Flows Not Shown**

The flow-of-funds account does not show exactly how funds flow from one sector to another. Instead it just shows the net flow for each sector.

For example, in the table one cannot tell whether the government budget deficit has been financed from the households and firms or whether it has been financed from the banks.

## Disaggregation

The flow-of-funds account compiled by the Federal Reserve is *very disaggregated*.

Many different financial assets are listed.

Financial intermediaries are divided into a number of sectors—commercial banks, savings and loan associations, savings banks, life insurance companies, etc.

## **Economic Research**

Curiously, economic researchers have not analyzed the flow-of-funds data as much as one might expect.