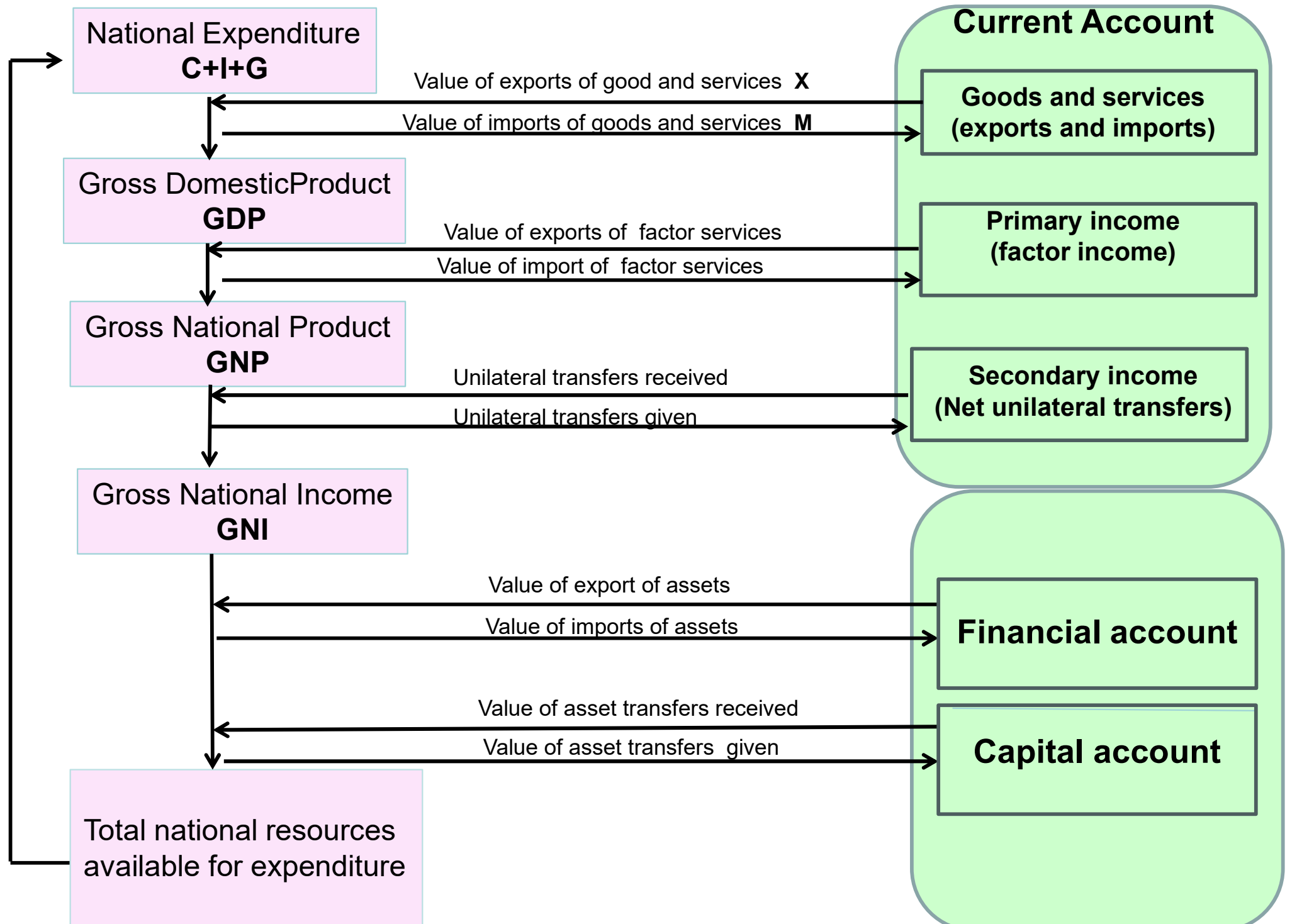


National income and product accounts

Balance of Payments accounts



Macroeconomic identities in an open economy –1 from national expenditure to GDP

Total expenditure by domestic residents:
 $C + I + G$

Total expenditure in domestic goods:
 $(C + I + G) + X - M$

$$\begin{aligned} \text{GDP} &= C + I + G + (X - M) \\ &= (C + I + G) + NX \end{aligned}$$

Macroeconomic identities in an open economy -2 from GDP to GNP and GNI

$$\begin{aligned} \text{GNP} &= \text{GDP} + \text{NFI}^* \text{ (net factor income from abroad (primary income balance))} \\ &= (\text{C} + \text{I} + \text{G}) + \text{NX} + \text{NFI} \text{ (primary income balance)} \\ &\quad \text{(trade balance)} \end{aligned}$$

$$\begin{aligned} \text{GNI} &= \text{GNP} + \text{NUT}^{\wedge} \text{ (net unilateral transfers (secondary income balance))} \\ &= (\text{C} + \text{I} + \text{G}) + \text{NX} + \text{NFI} + \text{NUT} \end{aligned}$$

*Net factor Income = Income received from ROW – Income paid to ROW

$\wedge$ Net Unilateral Transfers = Transfers received from ROW – Transfers paid to ROW

Income, expenditure and the CA

These accounting identities allow us to look at the Current Account deficits/surpluses from many different perspectives.

$$\text{GNI} = (\text{C} + \text{I} + \text{G}) + \underbrace{\text{NX} + \text{NFI} + \text{NUT}}_{\text{CA}}$$

Therefore we have:

CA: Current account balance

(1) $\text{CA} = \text{GNI} - (\text{C} + \text{I} + \text{G})$

The CA balance is the difference between national income and national expenditure.

Income, expenditure and the CA

(1)
$$CA = GNI - (C + I + G)$$

The CA balance is the difference between national income and national expenditure.

A current account deficit (**CA < 0**) means that a country's total spending exceeds its total income. To finance this gap, **the country is borrowing from the rest of the world** an amount equal to the difference between national expenditure and national income.

The current account deficit is financed by **net inflows from the financial account (and the capital account)**:

the value of domestic assets sold to the rest of the world (plus any asset transfers received) exceeds the value of foreign assets purchased from the rest of the world (plus any asset transfers made) by an amount equal to the CA deficit (see slide 23).

Income, expenditure and the CA

(1)
$$CA = GNI - (C + I + G)$$

The CA balance is the difference between national income and national expenditure.

Conversely, a current account surplus (**CA > 0**) means that a country's total spending is lower than its national income. As a result, **the country lends to the rest of the world** an amount equal to the difference between national income and national expenditure.

The current account (CA) surplus is matched by **net outflows in the financial account (and the capital account)**:

the value of foreign assets purchased from the rest of the world (plus any asset transfers made) must exceed the value of domestic assets sold to the rest of the world (plus any asset transfers received) by an amount equal to the CA surplus.(see slide 23).

The disposition of national savings

- National Income can be used for national consumption (private and public: $C+G$) or for national savings (private and public^{*}):

$$\mathbf{GNI = (C+G) + S^{tot}.$$

Therefore we can write:

- $$\mathbf{S^{tot} = GNI - C - G}$$

But we know from equation (1) that (see slide 26)

$CA = GNI - (C + I + G)$, so that $GNI - C - G = I + CA$;
therefore we get:

(2)

$$\mathbf{S^{tot} = I + CA}$$

An open economy can accumulate wealth by building real capital at home or by acquiring net financial claims on the rest of the world.

(remember that $CA > 0$ is matched by net outflows in the financial account (and capital account))

* Remember: Private savings is the difference between disposable income and consumption, while public savings is the opposite of public deficit. i.e. it is the differences between government revenues (taxes) and government spending (for transfers and public consumption)

The financing of domestic investment

From identity (2) if we isolate investment we have that:

- (3) $I = S^{\text{tot}} - CA$ (Where $-CA$ is the CA deficit)

An open economy can finance fixed investment by national savings or by borrowing abroad.

The composition of the CA

Finally, from identity (3) one gets:

- (4) $-CA = I - S^{\text{tot}}$

The current account deficit (-CA) is the difference between Investment and Savings

A current account deficit means that Investment is higher than national savings

A current account surplus means that national savings is higher than investment

Question: Is a current account deficit a bad thing?

1. $CA = GNI - (C+I+G)$

4. $-CA = I-S$

A current account deficit reflects an excess of national expenditure over national income, and an excess of investment over savings...

a) it can be a good thing if it reflects high investment (private or public) whose yields exceed the cost of foreign borrowing (this would increase future consumption opportunities).

b) If it reflects low savings resulting from higher current consumption (private or public), then repaying the external debt will require forgoing future consumption.

This may be desirable only if a unit of consumption today is worth more to society than the future consumption to be given up to repay the debt.

..... Is a CA surplus a good thing?

Question: Is a current account surplus a good thing?

1. $CA = GNI - (C+I+G)$

4. $-CA = I-S$

Your answer ...