

Macroeconomic Theory and Policy

Lecture 2

National Accounts:

Expenditure Approach

Income Approach

Value Added Approach

BOP Accounts:

Current Account

Capital Accounts

Expenditure (Final Demand) Approach to GDP

- Total income of an Economy is sum of total expenditure of households, firms, government and rest of the world
- $Y = C + I + G + X - M$
- C : durable and nondurable
- I: buildings and structures, plant and machinery
- G: provision of public and semi public goods
- X: demand for domestic goods by foreigners
- M: includes imports for C, I and G

Income approach to GDP

- GDP measure final income within a boundary of an economy
- It includes
 - Wages and Salaries of all workers
 - Remuneration for all capital
 - Net Operating Surplus
$$Y = wL + rK$$
- $GNP = GDP \pm$ net income from abroad

Value Added approach

- GDP is given by total of value added in final products sold in the market.

Value added

in a bread

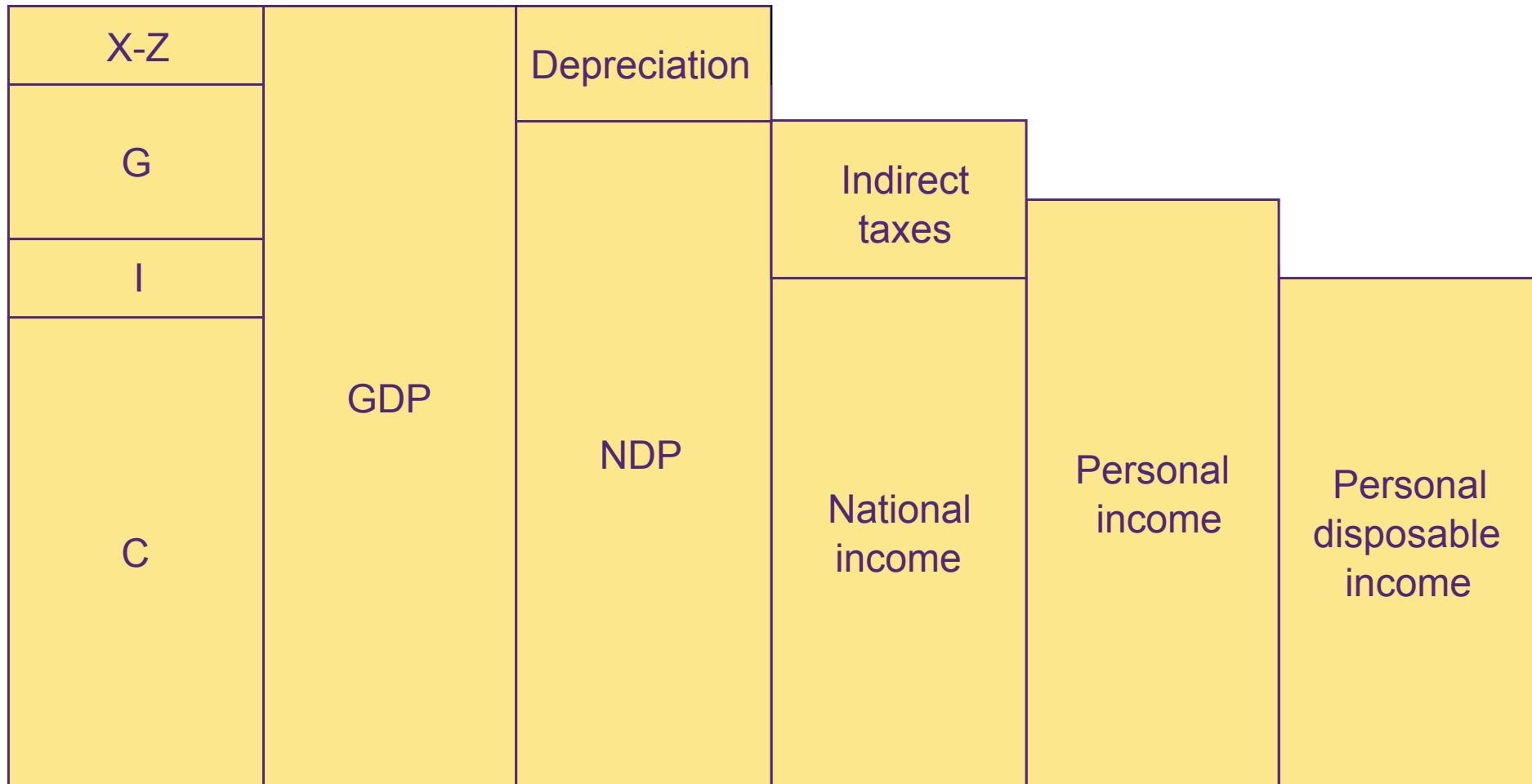
For a car

Wheat	20	iron ore	1000
Flower mill	15	Steel mill	500
Backery	30	Engine Factory	2000
Transport	15	Body builder	2000
Wholesale	10	whole sale	500
Retail	10	Retailer	500
Total	100	Total	6500

Fundamental Identity

- $Y = C + I + G + X - M$
- $C + S + T = Y = C + I + G + X - M$
- $(S - I) + (T - G) = X - M = \text{NET CAPITAL FLOW (NCF)}$
- NATIONAL SAVING = NET EXPORTS = NCF
- IT SHOWS THREE GAPS IN ECONOMY
- SUM OF SAVING INVESTMENT GAP AND REVENUE EXPENDITURE GAP MUST EQUAL NET EXPORTS
- DOMESTIC SAVING → CAPITAL OUTFLOW
- DOMESTIC DEFICIT → CAPITAL INFLOW

GDP, GNP, National and Disposable Incomes



INPUT-OUTPUT TABLE FOR AN ECONOMY

Input output table provides the demand and supply by production sectors

It shows backward and forward linkages across sectors in an economy

It gives technology of production, structure of final demand and income by sectors

$$X = AX + F$$

It is useful for analysing impacts of changes in final demand in output and employment throughout the economy for given prices

$$\Delta X = (I-A)^{-1}\Delta F$$

Fixed-coefficient technology is its draw back

Questions

- How can one measure the underground economy?
- How to avoid double counting?
- How is the economy wide price index derived?
- How to compare GDP's of different countries when the market exchange rates only reflect the tradable sector?

Balance of Payment Accounts

- CURRENT (TRADE)
- ACCOUNTCAPITAL (FINANCIAL)
ACCOUNT

Current ACCOUNT

- Credit : What an economy receives
- Debit: what an economy spends
- Current (Trade account) includes
exports and imports of goods and services
factor incomes
unilateral transfers (remittances)
- Capital (Financial account) includes direct
foreign investment and portfolio investment .

Capital ACCOUNT

Deficit (surplus) in current account is balanced by surplus (deficit) in capital account.

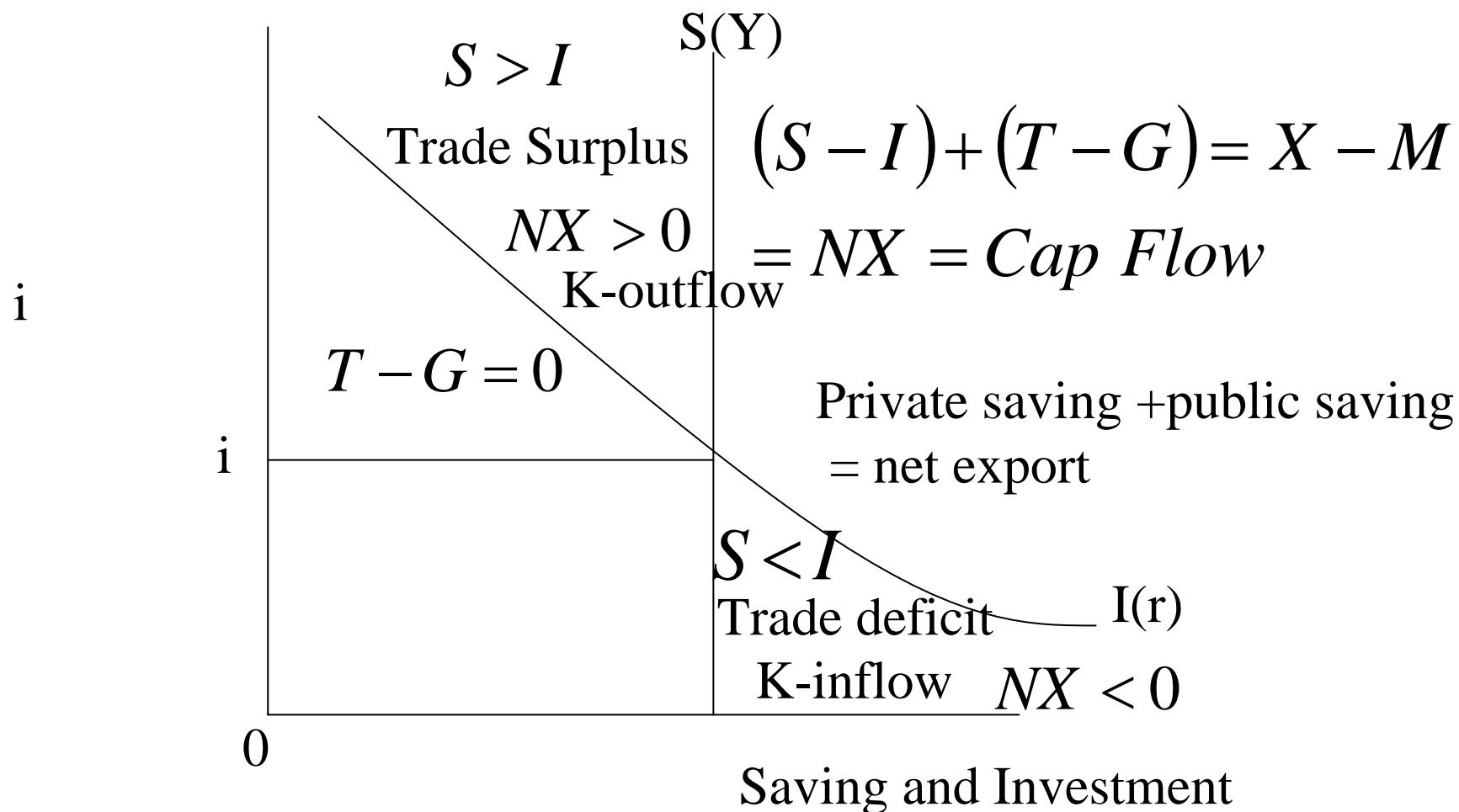
These balances reflect the underlying fiscal, monetary and exchange policies of an economy.

Errors and Omissions to take account of statistical discrepancies.

Change in reserves occurs if currency is let to appreciate or depreciate according to market demand and supply.

If authorities do not want any changes in reserves they need to depreciate or appreciate the exchange rate to maintain BOP condition.

Three GAPS: Investment-Saving, Budget and Trade Gaps



Recall: $Y = C + S + T + M = C + I + G + X = rK + wL + Tr$

Questions

- When is a Trade deficit a major problem?
 - USA has the largest trade deficit in the world
 - Why developing economies tend to have persistent imbalances in trade account?
- When is a given the exchange rate unsustainable?
 - Some Examples
- Why does BOP crisis also cause financial crisis?
- What are the demand and supply side policies for a sound balance of payment system?

References and data sources

- B&W 1,2, MS 2 , BL 2, MK 2
- Manual of the National accounts, www.statistics.gov.uk
- [Statistics.gov.uk](http://www.statistics.gov.uk) input-output table of the UK economy
- www.OECD.org
- <http://www.worldbank.org/research/growth/>
- <http://www.imf.org/external/pubs/ft/weo/weorepts.htm>
- <http://www.bankofengland.co.uk>
- <http://www.bis.org/cbanks.htm>