

INVESTMENT AND SAVINGS

EE 462 Development Macroeconomics

Semester 1/2020

Topics

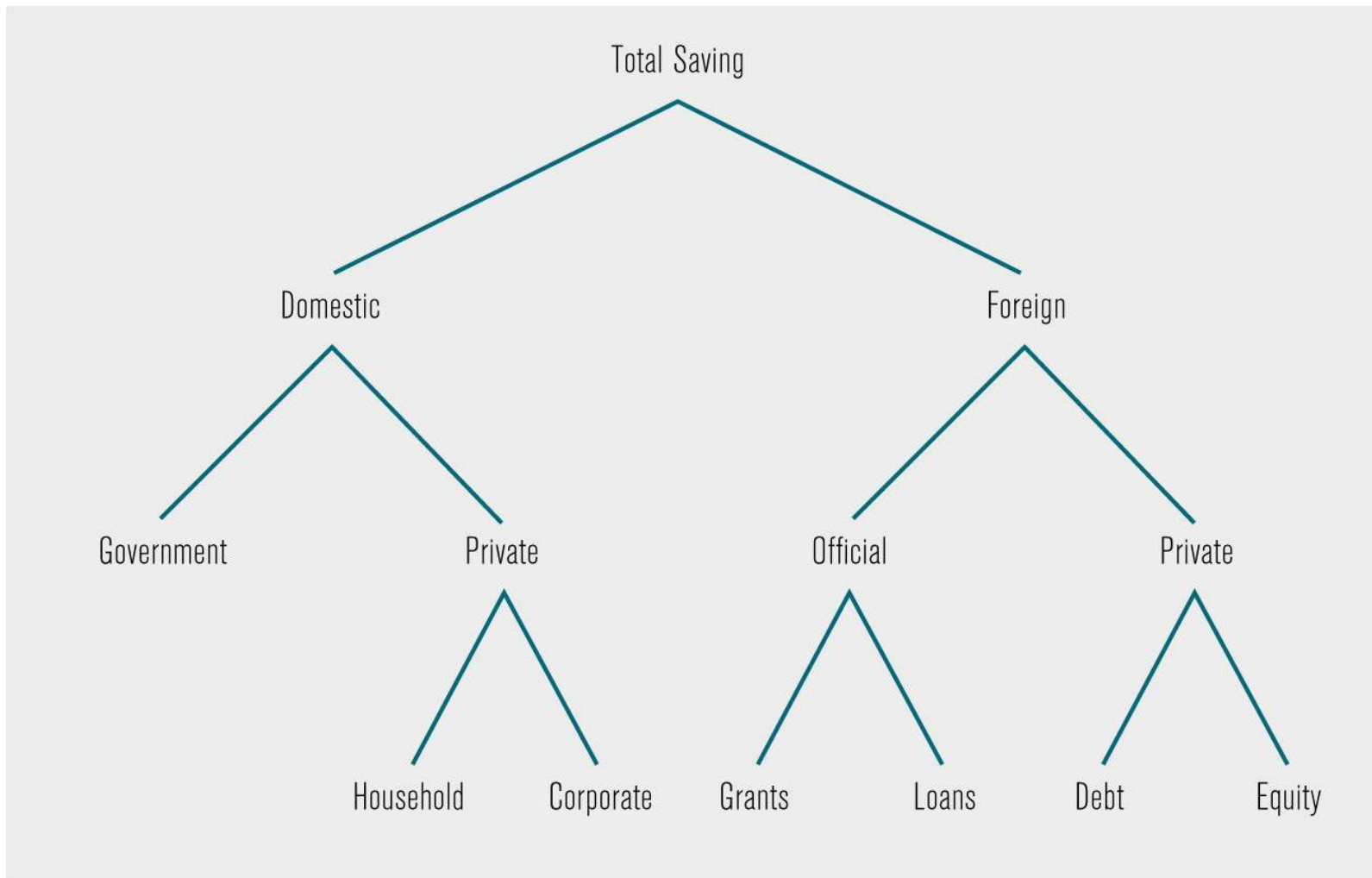
- Savings
 - Household Saving and Consumption
 - Foreign Saving
- Investment
 - Barriers to Productive Public and Private Investment
 - Foreign Direct Investment

SAVINGS

Savings

- **Domestic savings:**
 - Includes household, domestic corporation, and government savings
 - Saving rates vary across countries, but on average domestic savings tend to be higher in high- and middle-income countries.
- **Foreign savings:**
 - Includes foreign aid, FDI, portfolio equity, loans
- Interesting questions:
 - Can government policy have a major influence on a country's saving rate?
 - Does a rise in savings lead to a rise in investment that in turn leads to higher growth, or the causation goes in the other direction?

Key Components of Savings



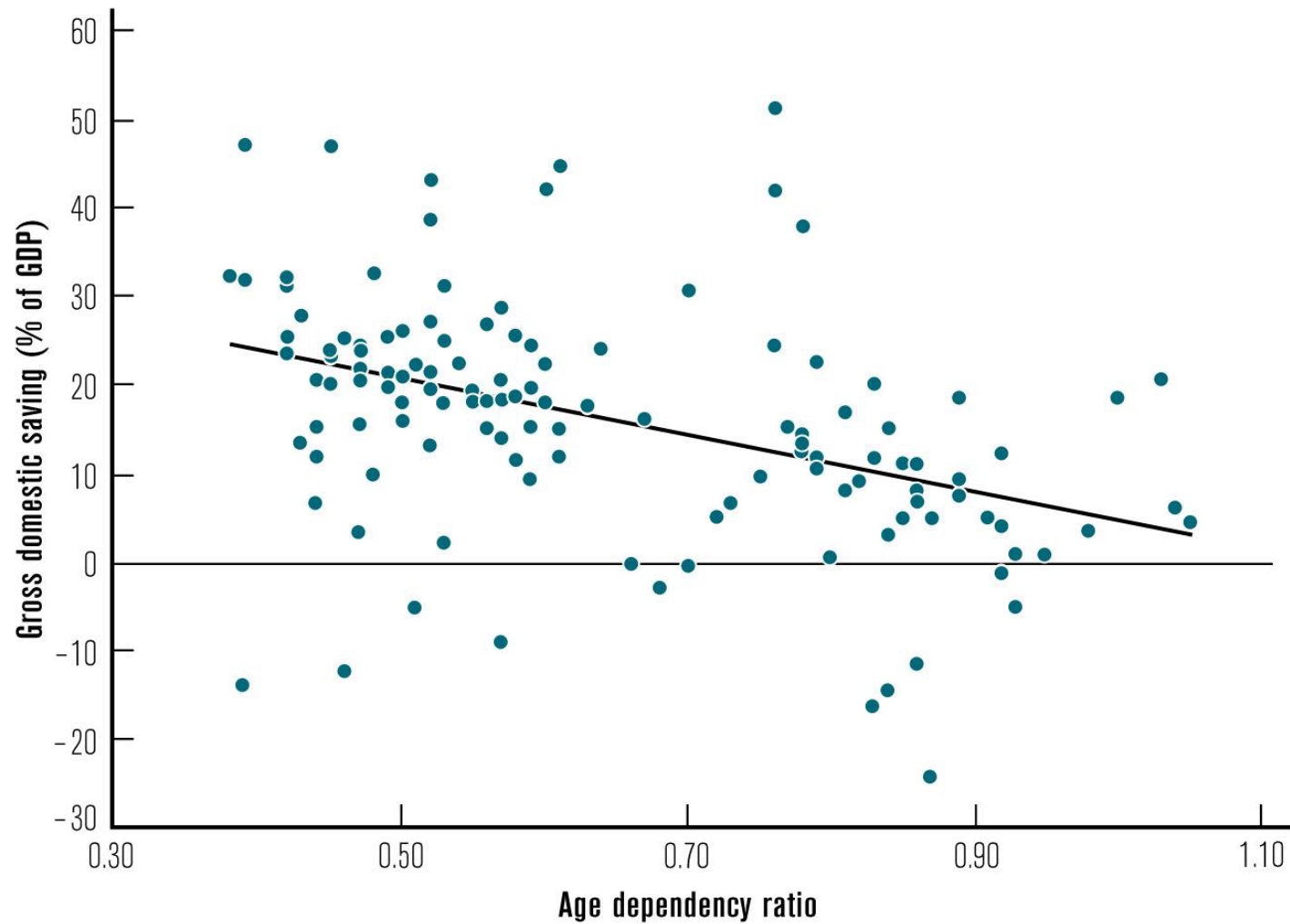
Household Saving and Consumption

- Individuals and households saves for 2 main purposes:
 1. To generate future income by saving and investing current income
 2. To protect themselves against unexpected falls in income in the future → **Precautionary savings**
- But, to save is to reduce in current consumption. So, what determine saving behavior?
- Modigliani's **life-cycle model** – saving and consumption vary systematically during a person's lifetime:
 - Lower savings when young
 - Rising saving and peak toward the middle and end of working years
 - Dissaving after retire

Life-Cycle Hypothesis and Demographic Structure

- Recall the demographic transition with 3 stages:
 1. High birth and death rates → low pop growth
 2. Declining death rates and continued high birth rates → high pop growth
 3. Low birth and death rates → low pop growth
- Question: In which stage of the demographic transition would a country have saving rates?
 - Stage 3
- Examples:
 - High saving rates in East Asia such as South Korea and Taiwan
 - China's one child policy

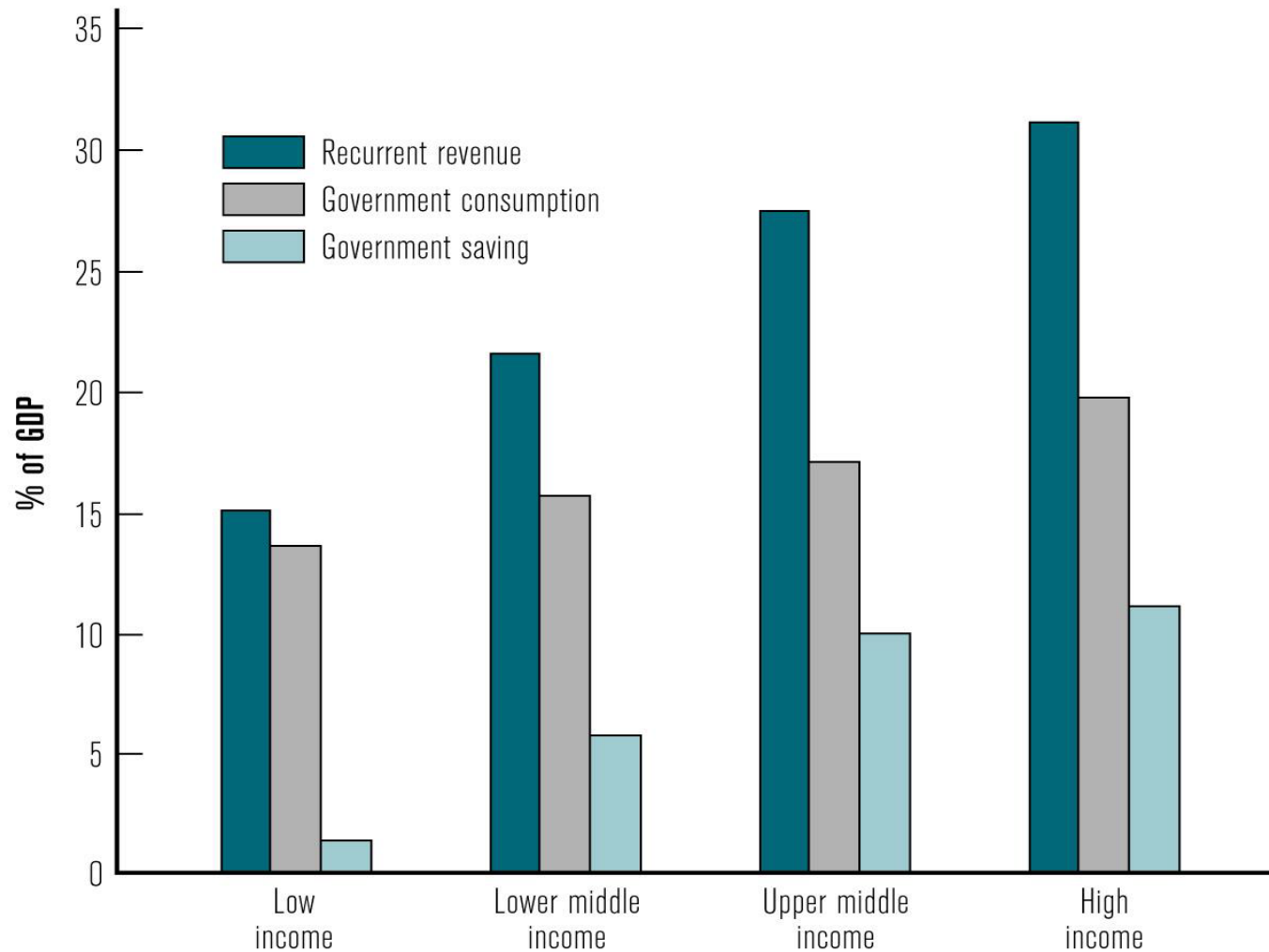
Gross Domestic Saving and the Age Dependency Ratio, 2003



Government Saving

- Government saving arises when tax revenues exceed public consumption expenditures.
 - Government saving can be changed by either increasing revenues or reducing consumption expenditures
- Key questions:
 1. To what extent can government increase the tax ratio (if they want to)?
 - ➔ Not so easily.
 2. Will an increase in the tax ratio lead to an increase in government saving?
 - ➔ Generally yes.
 3. Will an increase in government saving increase total domestic saving?
 - ➔ Not necessarily!

Government Revenue, Consumption, and Saving, 1990-2002



Government Saving and Domestic Saving

- Q: How does private saving responds to an increase in government spending?
- **Ricardo equivalence**: Any increase in public saving is offset by an equivalent decline in private saving, with total domestic saving remaining unchanged.
 - When there's a tax cut, government saving may fall, but private sectors increase private saving in anticipation of a future tax increase.
- Empirical studies finds that, in general, an *increase in government saving* tends to be associated with *a decline in private saving*, but less than the strict one-to-one relationship.
 - Will domestic saving increase or decrease?
 - Ex. 1% rise in gov't saving rate is associated with a 0.4 – 0.65 % decline in private saving.
 - ➔ Domestic saving increases ~0.35-0.6%.

Foreign Saving

- Recall the income side of the national account:

$$Y = C + I + G + X - M$$

- Expenditure side:

$$Y = C + S_p + T \quad (S_p = \text{private saving})$$

- Rearranging:

$$I = (T - G) + S_p + (M - X)$$

Where $T - G$ = government saving

$M - X$ = deficits of the balance of payments + foreign savings

- Alternative writing:

$$I = S_d + S_f \quad \text{or} \quad I - S_d = M - X$$

- As the difference between investment and domestic saving grows, the trade deficit grows proportionately.

Foreign Saving

- Two components of foreign saving:
 1. *Official foreign saving* – foreign aid provided on concessional terms as either **grants** or **soft loans**
 2. *Private foreign saving*:
 - *FDI* – made by nonresidents (typically MNCs) in enterprises located in hosted countries
 - *Portfolio equity* – purchase by foreigners of host country bonds or stocks
 - *Commercial bank lending*
 - *Export credits* – credits given to firms in developing countries that import from the industrialized countries (permitting delayed payment)

Capital Flows to Developing Countries, 1990-2003

	1990	1996	2000	2003
<i>Inflows</i>	107.0	307.1	206.2	272.1
Official development finance	51.8	25.8	28.1	23.7
Grants (excluding technical assistance)	25.4	23.0	23.2	38.0
Official loans (net)	26.4	2.8	4.9	-14.3
Private finance	55.2	281.3	178.1	248.4
Long-term debt flows (net)	16.6	82.5	7.4	22.9
Short-term debt flows (net)	13.2	37.4	-7.9	49.0
Portfolio investment	3.4	32.9	12.4	24.8
Foreign direct investment	22.1	128.6	166.2	151.8
<i>Outflows</i>	53.5	200.5	226.6	346.9
Accumulation of reserves	32.4	90.4	46.8	291.9
FDI from developing countries	5.0	10.0	16.5	24.0
Other items/errors and omissions	16.1	100.1	163.3	31.0
<i>Total</i>	53.5	106.6	-20.4	-74.8
<i>Memo item: Aggregate current account balance of developing countries</i>				
Excluding grants	-53.5	-106.6	20.4	74.8
Including grants	-28.1	-83.6	43.6	112.8

Source: World Bank, *Global Development Finance* 2005 and IMF, *International Financial Statistics*, annual yearbook.

INVESTMENT

Investment

- Investment is central to economic growth and development.
 - *Public investment* generally focuses on roads, infrastructures, schools, health facilities.
 - *Private investment* involves creating new jobs, new technologies, and growth in economic output.
- Question – what leads to “good investment” (i.e. Investment that promote growth either of individuals, large corporation, or the country as a whole?)
- Investment decision making can be made by using *cost-benefit analysis* (or *project appraisal*).
- Investment decision can also be affected by *ownership*.

Barriers to Productive Public and Private Investment

- **Political instability**
 - Lowers the rate of return and increases the risk of project
- **Macroeconomic instability**
 - Drives away from investment that promote long-term growth and toward investments that are protected from inflation
- **Rent-seeking behavior** – activities by private and public officials to extract value from a project without providing any compensation in return or contributing any increased productivity to the project.
 - Excessive or inappropriate regulations
 - Corruption
 - These can lead to low rate of return

Foreign Direct Investment

- *Foreign Direct Investment (FDI)* is a long-term investment in which a non resident entity exerts significant management control over an enterprise in the host country.
- *Portfolio equity* is another cross-border investment, in which investors take a smaller stake in an enterprise, either through a direct purchase or a stock exchange.
- Most FDI in developing countries is undertaken by multinational corporations (MNCs).
 - MNC – A firm that controls assets of enterprises located in countries other than its home country in which foreign operations are central to its profitability.

FDI Patterns and Products

- Three broad categories of FDI:
 1. **Natural resource-based activities**
 - Petroleum, minerals
 2. **Manufacturing and services aimed at the domestic market in the host country**
 - Consumer goods, capital-intensive goods, and some services
 3. **Labor-intensive manufacturing aimed for export on world markets**
 - Apparel, electronics, food processing, footwear, etc.

Benefits of FDI

- FDI is a **source of capital** that adds to total investment, and it is usually **more stable** than other forms of private foreign capital.
- In addition to new capital, FDI could add to the demand for labor and **generate employment**.
 - Note that the impact of FDI on wages and working conditions is still controversial. (Ex. Maquiladora in Mexico)
- FDI could help **increase specialization in production**, especially for FDI in manufactured exports.
- It can also bring **access to world markets**.
- Most important potential benefits is the **transfer of technology, skills, and ideas**; that is, it creates **positive externalities** or “spillovers”
 - Through the **training of workers and managers**

Drawbacks of FDI

- MNCs might create air or water pollution or cause other **environmental damage**, generating **negative externalities** in host countries.
- FDI could be a source of “**labor exploitation**” if the host country does not have strong regulations.
- **FDI in protected (or inefficient) activities** can lead to economic losses.
 - Ex. FDI in petrochemical industry where an MNC can be profitable only with government regulations that limit competition
- Lost of local control over business
 - MNCs can drive local businesses out of market

Questions for Discussion

- Should developing countries rely on FDI in order to promote economic growth?
 - Pros?
 - Cons?
- Can you think of any past evidences that show either positive or negative consequences (or both) of FDI on economic development?

FDI and Growth

- General findings about this relationship is mixed, but there's a pattern.
- FDI focusing on manufactured exports tends to have a positive relationship with growth and development.
 - Efficient and conducive to adoption of new technologies, training new workers, and positive spillovers.
- FDI for natural resources or for firms producing in protected domestic markets is less likely to be beneficial or even create economic losses for the host country.
 - Inefficient operations
 - Dependent on the impact of the industry (for natural resource based industry)

Policies toward FDI

- *Improve the general environment for all kinds of investment*
 - Improve the general infrastructure and improve the quality of labor
- *Introduce specific policies and incentives to attract FDI*
 - Establish industrial parks or **export-processing zones (EPZs)**
 - Provide specific incentives, such as protection from import competition (tariffs and quotas), **tax holidays** (tax exempts on corporate income)
- *Impose requirements on MNCs*
 - Requirement of specified share of equity to local partners to form “joint ventures”
 - **Domestic content requirement** – require MNCs to purchase a certain share of inputs locally