Macroeconomia
Capitolo 7

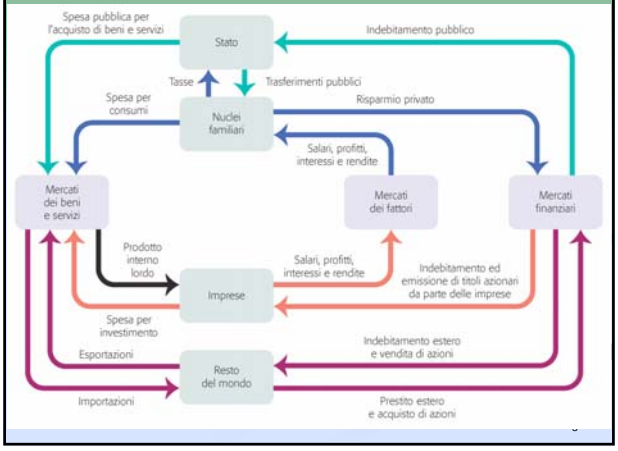
Seguire l'andamento della macroeconomia

PowerPoint® Slides
by Can Erbil

What you will learn in this chapter:

- How economists use aggregate measures to track the performance of the economy.
- *What **gross domestic product ,** or **GDP**, is and the three ways of calculating it*
- *The difference between **real GDP** and **nominal GDP** and why real GDP is the appropriate measure of real economic activity*
- *The significance of the **unemployment rate** and how it moves over the business cycle*
- *What a **price index** is and how it is used to calculate the **inflation rate**.*

2



The National Accounts

- Almost all countries calculate a set of numbers known as the ***national income*** *and* ***product accounts***.
- The national income and product accounts, or national accounts, keep track of the flows of money between different parts of the economy.

4

The National Accounts

- Households earn income via the factor markets from ***wages***, interest on ***bonds***, ***dividends*** on ***stocks***, and ***rent*** on land.
- In addition, they receive ***government transfers*** from the government.
- ***Disposable income***, total household income minus taxes, is either expended as ***consumer spending*** (C) or goes into ***private savings***.

5

The National Accounts

- Via the ***financial markets***, private savings is channeled to firms for ***investment spending*** (I).
- ***Government purchases of goods and services*** (G) is paid for by tax receipts as well as by ***government borrowing***.
- ***Exports*** (X) generate an inflow of funds into the country from the rest of the world, while ***imports*** (IM) lead to an outflow of funds to the rest of the world. Foreigners can also buy stocks and bonds in the U.S. financial markets.

6

Gross Domestic Product

Gross domestic product or ***GDP*** measures the value of all *final goods and services* produced in the economy. It does not include the value of *intermediate goods.*

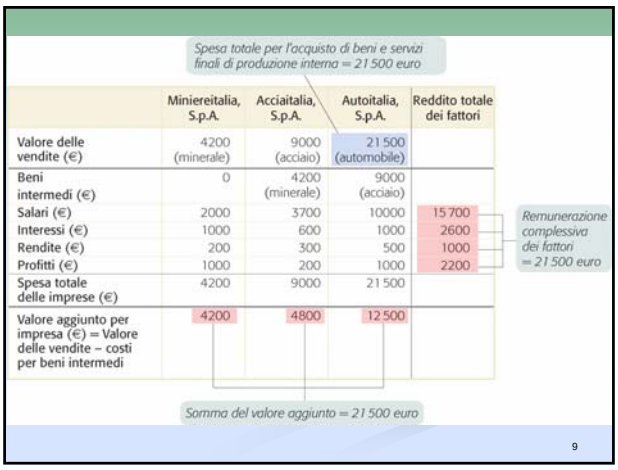
7

Calculating Gross Domestic Product

GDP can be calculated three ways:

- add up the ***value added*** of all producers;
- add up all spending on domestically produced final goods and services, leading to the equation **GDP = C+I+G+X-IM**;
- add up the all income paid to factors of production.

8



	Miniereitalia, S.p.A.	Acciaitalia, S.p.A.	Autoitalia, S.p.A.	Reddito totale dei fattori
Valore delle vendite (€)	4200 (minerale)	9000 (acciaio)	21 500 (automobile)	
Beni intermedi (€)	0	4200 (minerale)	9000 (acciaio)	
Salari (€)	2000	3700	10000	15 700
Interessi (€)	1000	600	1000	2600
Rendite (€)	200	300	500	1000
Profitti (€)	1000	200	1000	2200
Spesa totale delle imprese (€)	4200	9000	21 500	
Valore aggiunto per impresa (€) = Valore delle vendite – costi per beni intermedi	4200	4800	12 500	

9

Pitfalls: GDP: WHAT'S IN AND WHAT'S OUT

Included

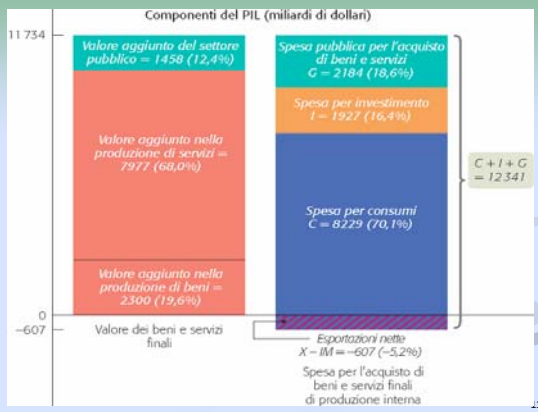
- Domestically produced final goods and services (including capital goods)
- New construction of structures
- Changes to inventories

Not Included

- Intermediate goods and services
- Inputs
- Used goods
- Financial assets like stocks and bonds
- Foreign-produced goods and services

10

U.S. GDP in 2004: Two Methods of Calculating GDP



11

Real vs. Nominal GDP

➢***Real GDP*** is the value of the final goods and services produced calculated using the prices of some base year.

➢Except in the base year, real GDP is not the same as ***nominal GDP***, output valued at current prices.

➢Real ***GDP per capita*** is a measure of average output per person, but is not by itself an appropriate policy goal.

12

Calculating GDP and Real GDP in a Simple Economy

	Year 1	Year 2
Quantity of apples (billions)	2,000	2,200
Price of apple	$0.25	$0.30
Quantity of oranges (billions)	1,000	1,200
Price of orange	$0.50	$0.70
GDP (billions of dollars)	$1,000	$1,500
Real GDP (billions of year 1 dollars)	$1,000	$1,150

13

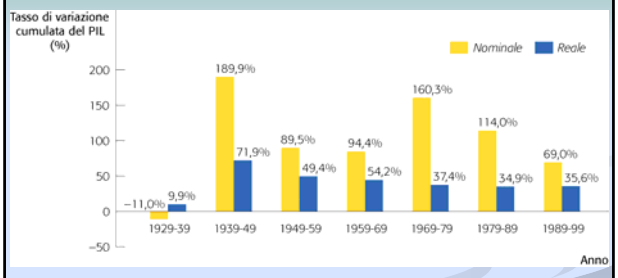
Real vs. Nominal GDP

Nominal versus Real GDP in 1996, 2000, and 2004

	Nominal GDP (billions of current dollars)	Real GDP (billions of 2000 dollars)
1996	$7,817	$8,329
2000	9,817	9,817
2004	11,734	10,842

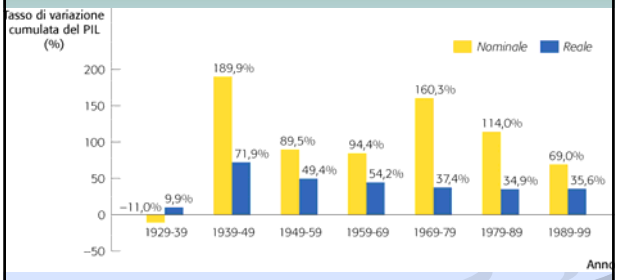
Source: U.S. Commerce Department.

14

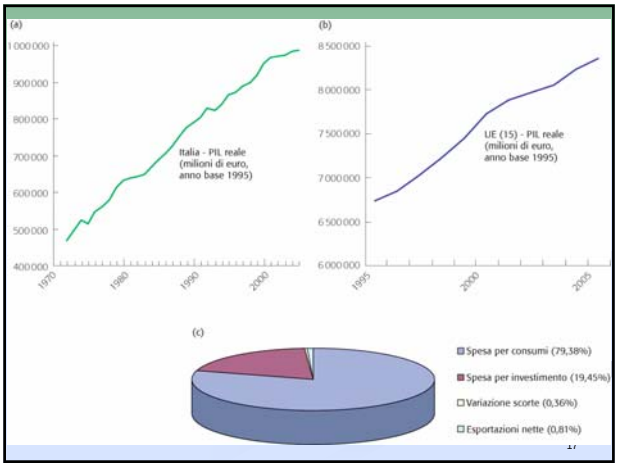


15

Real vs. Nominal GDP



16

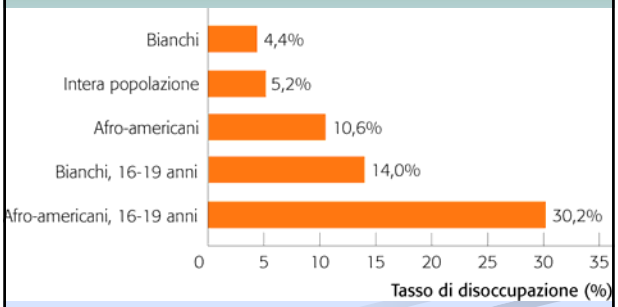


The Unemployment Rate

- The ***unemployment rate*** is an indicator of the state of the labor market, but should not be taken literally as a measure of the fraction of people who want to work but can't find jobs.
- It may ***overstate*** the true level of unemployment because a person typically spends time unemployed while in search of a job before finding one.
- It also may ***understate*** the true level of unemployment because it does not include discouraged workers.

18

Unemployment Rate



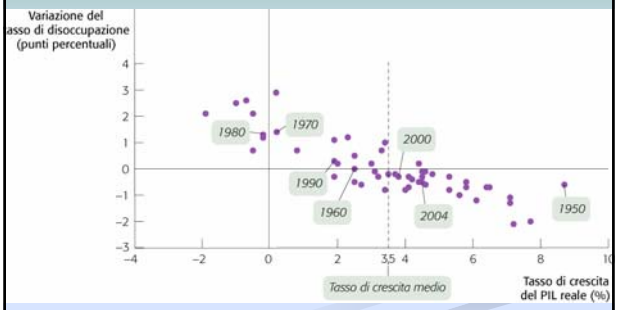
19

Growth and Unemployment

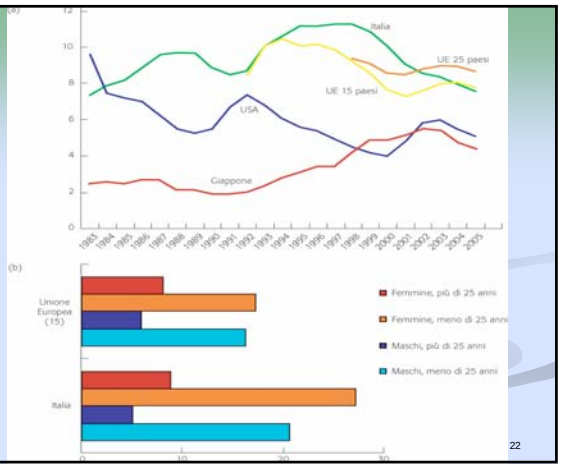
There is a strong relationship between growth in aggregate output and changes in the unemployment rate: ***when growth is above average, the unemployment rate falls, when it is below average, the unemployment rate rises***.

20

The Relationship between Real GDP and Unemployment, 1949-2004



21



22

Price Indexes and the Aggregate Price Level

- To measure the aggregate price level, economists calculate the cost of purchasing a ***market basket***.
- A ***price index*** is the ratio of the current cost of that market basket to the cost in a base year, multiplied by 100.

$$\text{Price index in a given year} = \frac{\text{(Cost of market basket in a given year)}}{\text{(Cost of market basket in base year)}} \times 100$$

23

Calculating the Cost of a Market Basket

	Pre-frost	Post-frost
Price of orange	$0.20	$0.40
Price of grapefruit	$0.60	$1.00
Price of lemon	$0.25	$0.45
Cost of market basket (200 oranges, 50 grapefruit, 100 lemons)	(200 × $0.20) + (50 × $0.60) + (100 × $0.25) = $95.00	(200 × $0.40) + (50 × $1.00) + (100 × $0.45) = $175.00

24

Inflation Rate, CPI and other Indexes

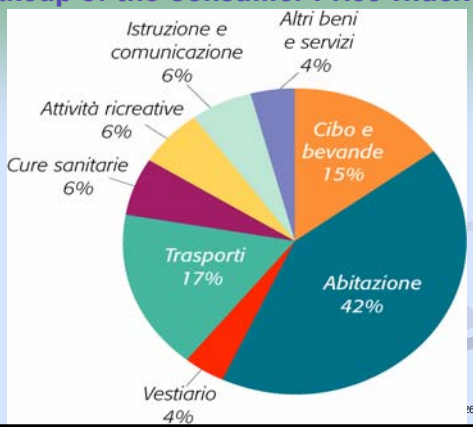
The ***inflation rate*** is the yearly percentage change in a price index, typically based upon ***Consumer Price Index***, or ***CPI***, the most common measure of the aggregate price level.

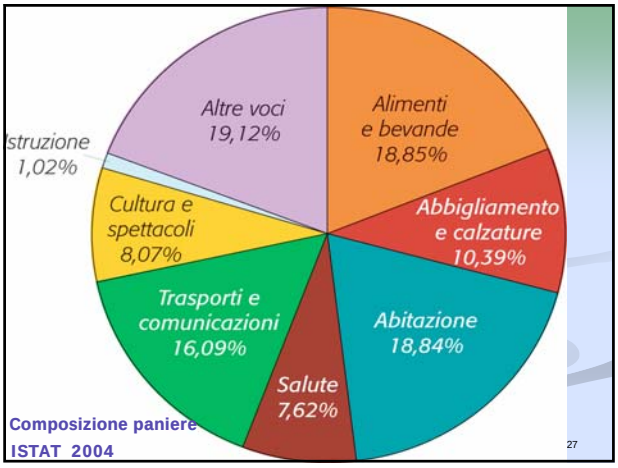
$$\text{Inflation rate} = \frac{(\text{Price index in year 2} - \text{Price index in year 1})}{(\text{Price index in year 1})} \times 100$$

The *consumer price index*, or *CPI*, measures the cost of the market basket of a typical urban American family.

25

The Makeup of the Consumer Price Index in 2004

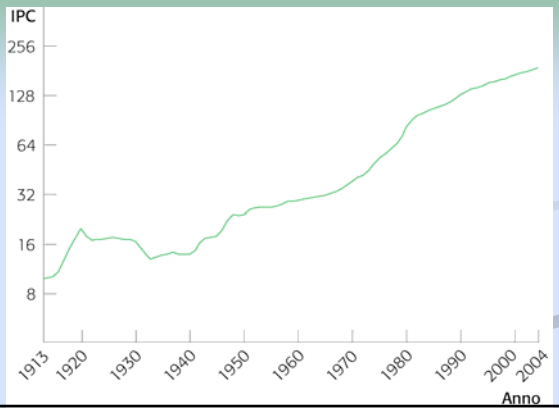




Composizione paniere ISTAT 2004

27

The CPI, 1913–2004

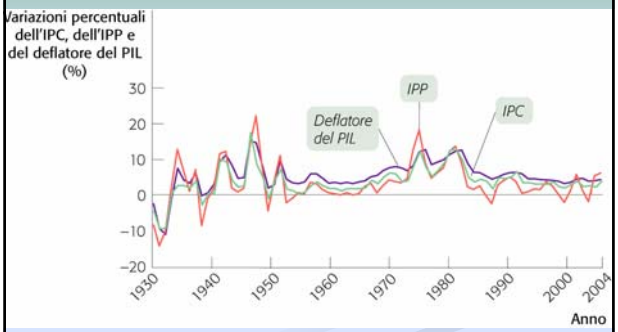


Other Price Measures

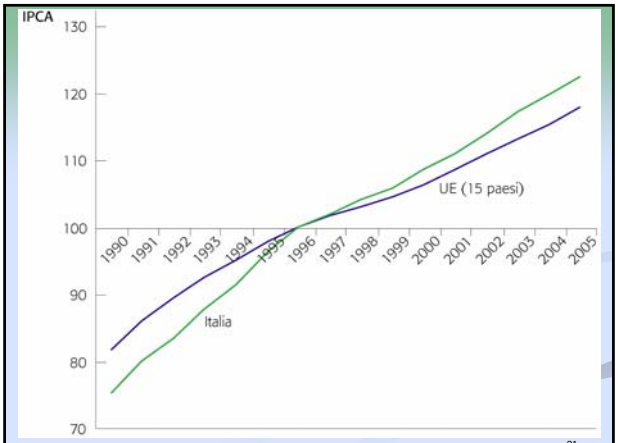
- A similar index to CPI for goods purchased by firms is the ***producer price index***.
- Economists also use the ***GDP deflator***, which measures the price level by calculating the ratio of nominal to real GDP.
- The *GDP deflator* for a given year is 100 times the ratio of nominal GDP to real GDP in that year.

29

The CPI, the PPI, and the GDP Deflator



30



31

The End of Chapter 7

coming attraction:

Chapter 8:
Long-Run Economic Growth

32