

Nominal GDP (or GDP at *Current Prices*)

Real GDP (or GDP at *Constant Prices*)

Real *versus* Nominal GDP

Year	Price of Hot Dogs	Quantity of Hot Dogs	Price of Burgers	Quantity of Burgers
2019	\$1	100	\$2	50
2020	\$2	150	\$3	100
2021	\$3	200	\$4	150

Calculating Nominal GDP

2019	$(\$1 \text{ per hot dog} \times 100 \text{ hot dogs}) + (\$2 \text{ per burger} \times 50 \text{ burgers}) = \200
2020	$(\$2 \text{ per hot dog} \times 150 \text{ hot dogs}) + (\$3 \text{ per burger} \times 100 \text{ burgers}) = \600
2021	$(\$3 \text{ per hot dog} \times 200 \text{ hot dogs}) + (\$4 \text{ per burger} \times 150 \text{ burgers}) = \1200

Calculating Real GDP (Base year 2019)

2019	$(\$1 \text{ per hot dog} \times 100 \text{ hot dogs}) + (\$2 \text{ per burger} \times 50 \text{ burgers}) = \200
2020	$(\$1 \text{ per hot dog} \times 150 \text{ hot dogs}) + (\$2 \text{ per burger} \times 100 \text{ burgers}) = \350
2021	$(\$1 \text{ per hot dog} \times 200 \text{ hot dogs}) + (\$2 \text{ per burger} \times 150 \text{ burgers}) = \500

GDP Deflator: Ratio of *nominal* GDP in a given year to *real* GDP of that year — a measure of *inflation* (also known as the ***implicit price index***).

$$\text{GDP Deflator} = \frac{\text{Nominal GDP}}{\text{Real GDP}} \times 100$$

<i>Calculating the GDP Deflator</i>	
2019	$(\$200 / \$200) \times 100 = 100$
2020	$(\$600 / \$350) \times 100 = 171$
2021	$(\$1200 / \$500) \times 100 = 240$

Because the GDP Deflator rose in year 2020 from 100 to 171, we say that the price level has increased by 71 percent.

The percentage increase in the price level is the *rate of inflation*.

Major [Macro]Economic Objectives

- Output: High *level* and rapid *growth* of output.

Growth without social justice is inhuman and social justice without growth is impossible.

- Employment:

High level of employment with low involuntary unemployment.

- Price-level stability: *Stable moderate inflation rate.*

Redistributive justice: reduction of inequalities /poverty alleviation

The Macroeconomic History of the Twentieth Century

The Great Depression!

The U.S. economy was already past the peak of the business cycle when the stock market crashed in 1929. The stock market crash on "Black Tuesday", October 29, 1929, saw American common stocks lose a tenth of their value.

The US Unemployment Rate During Great Depression

Year	Unemployment Rate (%)
1929	3.2
1930	8.7
1931	15.9
1932	23.6
1933	24.9
1934	21.7
1935	20.1
1936	16.9
1937	14.3

High unemployment \Rightarrow Low employment \Rightarrow Low income \Rightarrow Low demand \Rightarrow Low output

The way in which we nowadays study macroeconomics largely owes its origins to John Maynard Keynes's *The General Theory of Employment, Interest and Money* published in 1936.

In his seminal work, John Maynard Keynes set out to challenge the mainstream neoclassical economic thoughts of those days, which Keynes castigated as unable to explain or offer policy solutions for the high level of unemployment which rose to 22 percent in 1932.

Keynesian Economics: *Output is demand determined.*

Main Twofold Arguments of Keynes (1936)

It is possible for high unemployment and underutilized capacity to persist in market economies.

Government policies (*fiscal* and *monetary*) can affect output and thereby reduce unemployment and shorten economic downturns.

Govt. exp. & Tax

Money supply & Interest rate

Post World War II, for the first time in history, the U.S Congress affirmed the government's role in promoting output growth, fostering employment and maintaining price stability.

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