Manisha 2-54

topic 5 ans

1. Nominal GDP calculation

GDP = Sum of (quantity × Price) for all final goods and services.

- Automobiles: 1,000,000 × 10,000 = 10,000,000,000
- Clothing: 5,000,000 ×100 = 500,000,000
- Food: 10000000 ×2 = 20000000
- Rent: 2000000 × 4000 = 8000000000
- Attorney services: 1000000 × 20 = 20000000
- Medical services: 2000000 × 30 = 60000000

Sum:

10000 + 500 + 20 + 8000 + 20 + 60 million

18,600 million dollars

or

$18.6 billion

2. Nominal GDP increase interpretation

No. Nominal GDP can rise purely because of higher prices (inflation). Real GDP adjusts for price changes and measures actual production. Without knowing if price levels increased, we cannot conclude that aggregate production, real income, or job opportunities

3. GDP overestimation with intermediate products

GDP counts only the value of final goods and services to avoid double counting.

Intermediate products are already included in the value of final goods. Adding them separately would count their value multiple times, overstating GDP.

Example:

If wheat \$1 → flour \$2 → bread \$3,
value added = \$1 (wheat) + \$1 (milling) + \$1 (baking)
= \$3 final price of bread.
Including all sales (\$1+\$2+\$3) = \$6 overstates

4. Value added from total sales

Value added = Total sales of all goods and services
− Sales of intermediate products

Value added = 10000 billion - 6000 billion = 4000
This equals GDP.

5. Gross Private domestic investment

$GDP = C + I + G + NX$

Given: $GDP = 4{,}500$, $C = 3{,}000$, $G = 1{,}000$, $NX = 0$.

$4500 = 3000 + I + 1000 + 0$

$4500 = 4000 + I$

$I = 500$ billion

6. Government Purchases in GDP vs. actual

Government Purchases in GDP (G) = spending on goods and services Produced in the current Period.

Total government expenditures include transfer payments (e.g., Social Security, unemployment benefits), interest on debt, and subsidies, which are not payments for currently Produced goods/services — they redistribute income rather than buy output.

Example: Social Security payments are an important government expenditure not included in G.