Value Added Approach

How to measure GDP using the Value Added approach?

What Is GDP?

- **GDP is the nation's expenditures on all FINAL goods and services produced during the year at market prices.**

Two Things To Avoid

1. **Intermediate goods**
2. **Transfer Payments**

Two Things to Avoid when Compiling GDP

- **Multiple counting**
  - **Only expenditures on final products – what consumers, businesses, and government units buy for their own use belong in GDP**
    - **Intermediate goods are not counted**
    - **Used goods are not counted**

Two Things to Avoid when Compiling GDP

- **Transfer payments**
  - **Transfer payments are not payments for currently produced goods and services**
    - **When they are spent for final goods and services they will go into GDP as consumer spending**
    - **Financial transactions don't go into GDP**

Why only Final Goods

- Counting the sale of final goods and intermediate products would result in double and triple counting.

What is counted? What is not?

Only the value of the final sale is counted.

So they are not counted when the manufacturer buys them.

This is confusing!

- The tires that come with the car is **not** counted as a final good
- However if you get a flat and buy the same tire it is counted as a final good

No Problem!

- To correct for this problem economist have created the Value Added approach.

Value Added Approach Eliminates Double Counting

Participants	Cost of Materials	Value of Sales	Value Added
Farmer	$ 0	$ 100	$ 100
Cone factory and ice cream-maker	100	250	150
Middleperson	250	400	150
Vendor	400	500	100
Totals	$ 750	$1,250	$500

The Value-added Approach to Measuring GDP

	Production	Generated	Added
Farmer	harvest wheat	$100	$100
Miller	makes into flour	200	100
Baker	makes into bread	300	100
		$600	$300

GDP counts only the $ value of the final good

This is the same as the "value-added."

Calculating GDP

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

Calculating GDP

Total spending on domestically produced final goods and services = $21,500

	American Ore, Inc.	American Steel, Inc.	American Motors, Inc.	Total factor income
Value of sales	$4,200 (ore)	$9,000 (steel)	$21,500 (car)	
Intermediate goods	0	4,200 (iron ore)	9,000 (steel)	
Wages	2,000	3,700	10,000	$15,700
Interest payments	1,000	600	1,000	2,600
Rent	200	300	500	1,000
Profit	1,000	200	1,000	2,200
Total expenditure by firm	4,200	9,000	21,500	
Value added per firm = Value of sales − cost of intermediate goods	4,200	4,800	12,500	

Total payments to factors = $21,500

Sum of value added = $21,500