Measuring GDP

GDP measures value of all goods & services produced in a country during a period of time.

what - goods - (newly only produced)
services measured in terms of value = price of each.

where → in A country (domestic)
- Goods produced By Americans overseas (not)
- Goods " " Foreigners here (yes)

when → Quarterly - 3 month intervals

yearly.

Price Determine Value

Pencil & Paper & Pens. → typewriter & Paper. → computer printer wrd. Paper.

Final goods vs intermediate goods

Intermediate good - undergoes Addl. processing Before Being sold to consumers

Final good - no further processing

We don't count intermediate goods
to avoid double counting.

$2.50 loaf
consumer

wheat 10¢ → Flour 25¢
yeast
water
Salt
→ Bread $1.00 → Subway → consumer.
add ot stuff.
work $2.00
6" $4.50 sandwich

$2.50 loaf already includes the price of intermed goods.

As does subway.

Stock vs Flow

Stock - what exists.
Flow - how it changes. (Rate)

GDP is a Flow since we are measuring new stuff. It is how much is added each period.

3 ways to measure GDP

Spending - Break final goods & services into categories that reflect who is doing the spending ~~or what~~.

Consumption - individuals

Investment - purchase of final goods by firms and new houses. By consumers.

Firms purchase final goods and use them to produce things

Factory
Vehicles $\rightarrow$ Investment.
Machines

none of these are processed things further, only used to produce. stuff to sell elsewhere.

Investment

Business Fixed Investment
(Machines, Factories, tools)

Inventory Investment
$\equiv$ change in Inventories

Inventories $\uparrow$ $\equiv$ INV Invest > 0

Inventory $\downarrow$ $\equiv$ " Invest < 0

Cars Example. Invent.

12/31/09	50	Inventory
2010	+ 35	New from Factory.
2010	− 60	sales
12/31/10	25	Inventory

$\Longrightarrow$ INV Investment = − 25 cars.

And will be measured in terms of the price of those cars.

	Cars		Price		
12/09 INV.	50	x	20,000	=	1,000,000
2010 Purch	35	x	21,000	=	+ 735,000
2010 sales	60	x	50 x 20,000 10 x 21,00	=	− 1,000,000 − 210,000
					525,000

INV 2010		INV 2009		INV. Invest
\$ 525,000	−	\$ 1,000,000	=	−\$ 475,000

Obviously, Inv. Invest can be negative if firms sell more than they add to inventory during the year. This ⇒ Potential sales are ↓, firms cut back

Very volatile and plays a large role in Bus. Cycle.

Residential Invest.

–

Gov't Purchases of Goods & Services.

Fed, state, local.

Excludes Transfer Payments
Soc. Sec, welfare, unemployment

Net Exports

Export − Import = Net Exports

what we sell to Foreigners

what we Buy from For.

For US This is usually Negative And Reduces our GDP.

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

Income Approach.

Add up what each person and firm earns.

Basically, when a firm sells a final good or service the proceeds end up in someone's pocket.

Sell New Car $40,000

- 20,000 Labor
- 5,000 Profit
- 2,000 Taxes
- ~~3,000 Depreciation on equipment.~~
- $13,000 suppliers.

Aggregate Income

Labor (wage, salaries, Fringe Benes)
Capital (profit, interest, rent)
Depreciation
Taxes, Subsidies, Transfers
Net income of Foreigners

Depreciation – stuff used to make things (and houses) wear out.
Decrease in ~~value of~~ the worth of existing asset ≡ Depr.

(Gross) Investment – Depreciation = Net Investment.
(Same as in Expend.)

Taxes, Subsidies, Transfers

Add Taxes (Earning of Gov't)
Subt Subsidies (show up in Profit AND this eliminates double counting)

Subt Transfers (payment to Granny doesn't count).

Net Inc of Foreigners (+)

Migrant workers come to U.S., earn \$, this adds to OUR GDP.
When I went to Florence and taught there, my earnings did not.

+ Earnings of Fn in U.S.

— Earning of U.S. cit abroad

Net income of Fn.

Stat. discrepancy — oops!
It never adds up exactly!

Production
add up value added at each level of production

See subway example

Bread loaf.
10¢ + 15¢ + .75 + 1.50 = $2.50
Wheat Flour ~~Bread~~ Wholesale Retail.