

## The National Income and Product Accounts (NIPA)



Data source for all slides are Bureau of Economic Analysis unless otherwise indicated. See <http://www.bea.gov> for data sources.

### Reminder

- Make sure you go to the course assignments page <http://www2.hmc.edu/~evans/e53ca.html> and download and begin HW1.
- Don't forget that higher quality pdfs of these slides are at <http://www2.hmc.edu/~evans/e53ls.htm>
- If looking for material, always go back to source <http://www2.hmc.edu/~evans/hmcgre.html>

## What we intend to show ...

1. This is a consumption-driven economy
2. We import a lot more than we export
3. Economic growth has been robust, about 3.5%
  - ... but not this year (2008-2009).
4. The bulk of national income is in wages and salaries
5. We have become much more of a service (financial, health, legal, education, insurance, etc.) economy and less of a manufacturing and agricultural economy (in terms of value produced).
6. We don't save (at the personal level).

Refer to handout of this same chart ...

**Table 1.1.5. Gross Domestic Product**  
[Billions of dollars]  
Bureau of Economic Analysis

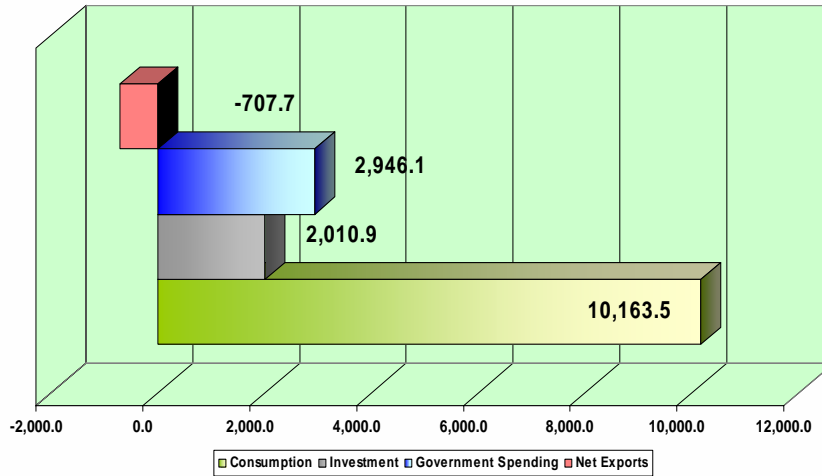
Line	2003	2004	2005	2006	2007	2008e	% growth 2008	% tot
1 Gross domestic product	10,960.8	11,685.9	12,421.9	13,178.4	13,807.5	14,412.8	4.4%	100.0%
2 Personal consumption expenditures	7,703.6	8,195.9	8,694.1	9,207.2	9,710.2	10,163.5	4.7%	70.5%
3 Durable goods	942.7	983.9	1,020.8	1,052.1	1,082.8	1,016.2	-6.2%	7.1%
4 Nondurable goods	2,190.2	2,343.7	2,514.1	2,685.2	2,833.0	3,044.6	7.5%	21.1%
5 Services	4,570.8	4,868.3	5,159.2	5,469.9	5,794.4	6,102.7	5.3%	42.3%
6 Gross private domestic investment	1,664.1	1,888.6	2,086.1	2,220.4	2,130.4	2,010.9	-5.6%	14.0%
7 Fixed investment	1,649.8	1,830.0	2,042.8	2,171.1	2,134.0	2,060.6	-3.4%	14.3%
8 Nonresidential	1,077.4	1,154.5	1,273.1	1,414.1	1,503.8	1,581.2	5.1%	11.0%
9 Structures	277.2	298.2	337.6	410.4	480.3	572.4	19.2%	4.0%
10 Equipment and software	800.2	856.3	935.5	1,003.7	1,023.5	1,008.8	-1.4%	7.0%
11 Residential	572.4	675.5	769.6	757.0	630.2	479.4	-23.9%	3.3%
12 Change in private inventories	14.3	58.6	43.3	49.3	-3.6	-49.7	1280.6%	-0.3%
13 Net exports of goods and services	-499.4	-615.4	-713.6	-757.3	-707.8	-707.7	0.0%	-4.9%
14 Exports	1,040.8	1,182.4	1,311.5	1,480.8	1,662.4	1,968.9	18.4%	13.7%
15 Goods	724.4	818.3	908.4	1,032.1	1,149.2	1,374.3	19.6%	9.5%
16 Services	316.4	364.1	403.1	448.7	513.2	594.6	15.9%	4.1%
17 Imports	1,540.2	1,797.8	2,025.1	2,238.1	2,370.2	2,676.6	12.9%	18.6%
18 Goods	1,283.9	1,499.5	1,705.3	1,862.7	1,985.2	2,251.0	13.4%	15.6%
19 Services	256.2	298.3	319.8	355.4	385.1	425.6	10.5%	3.0%
20 Government consumption expenditures & investment	2,092.5	2,216.8	2,355.3	2,508.1	2,674.8	2,946.1	10.1%	20.4%
21 Federal	756.4	825.6	875.5	932.2	979.3	1,098.0	12.1%	7.6%
22 National defense	497.2	550.7	588.1	624.1	662.2	759.5	14.7%	5.3%
23 Nonddefense	259.2	274.9	287.4	308.0	317.1	338.5	6.7%	2.3%
24 State and local	1,336.0	1,391.2	1,479.8	1,575.9	1,695.5	1,848.1	9.0%	12.8%

... note that the 2009 Obama stimulus package is about 5% of GDP.

### Major Components of GDP: 2008 Q3

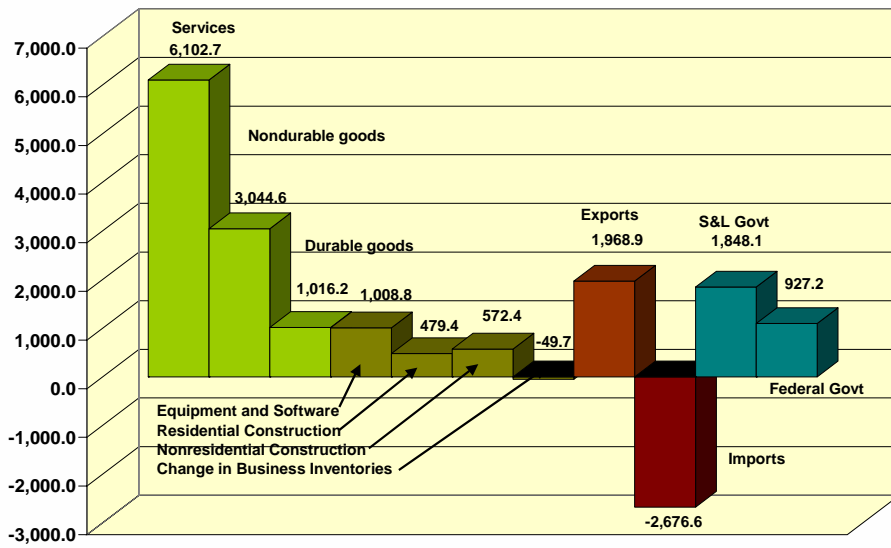
(trillions \$, annualized data)

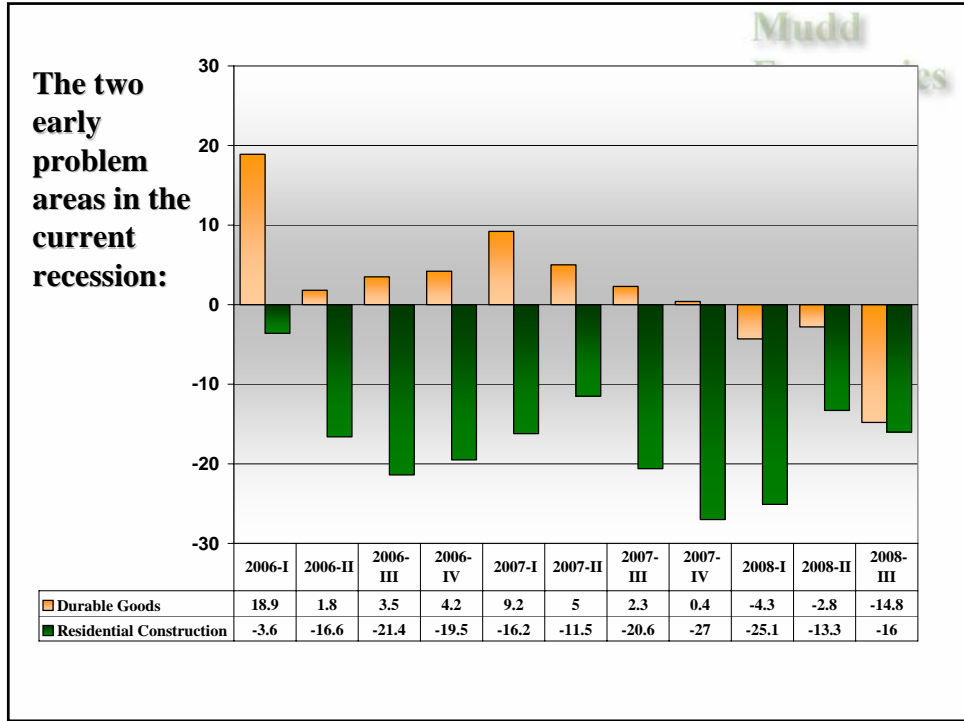
Total: 14,412.8 billion



### NIPA Accounts: 2008 Q3 annualized

GDP \$14.4128 trillion





Mudd  
Economics

### These NIPA categories

- **Real GDP** adjusts monetary GDP by removing inflation (the data are deflated by a statistic called the **implicit price deflator**).
- **Services** include financial, health, recreational, transportation, housing, and education
- **Consumer durables** are "big ticket" goods like autos and furniture, often purchased with credit.
- **Residential investment** reflect the value of new home construction, so this spending is not included in consumption.
- **Change in business inventories** are small, may be positive or negative, and are sometimes early indicators of recession when they grow, but deep in a recession can turn strongly negative.
- **Government** spending in both categories does *not* include **transfer payments** like Social Security.

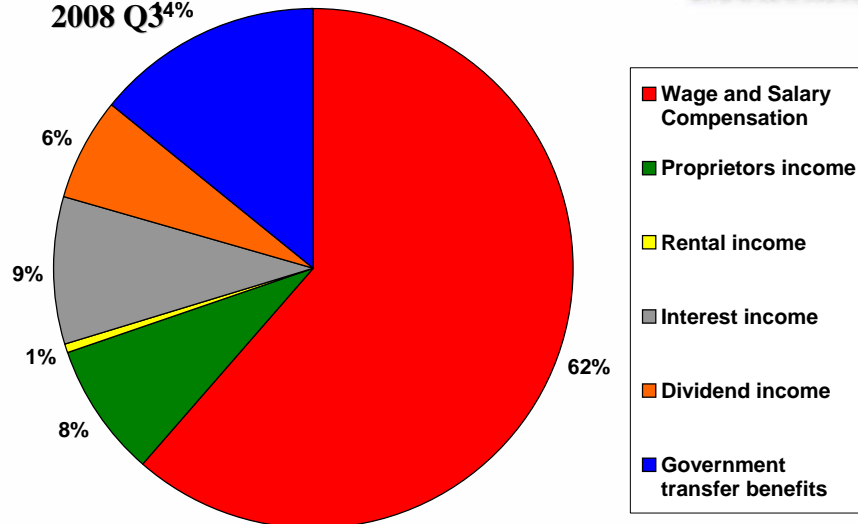
## The Statistical Difference Between GDP and National Income

(and don't worry, you're not required to know this)

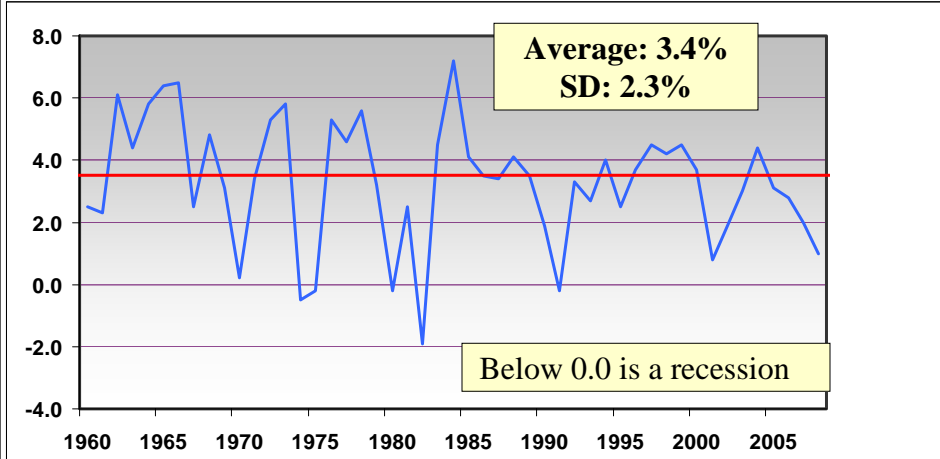
### Gross Domestic Product

- plus Receipts of overseas income
- less Payments to overseas income
- equals Gross National Product
- less Consumption of Fixed Capital
- equals Net National Product
- less Indirect Business Taxes and Tax Liability
- less Business Transfer Payments
- less Statistical Discrepancy
- plus Subsidies less current surplus of government enterprises
- equals National Income

## National Income and its Disposition: 2008 Q3<sup>4%</sup>

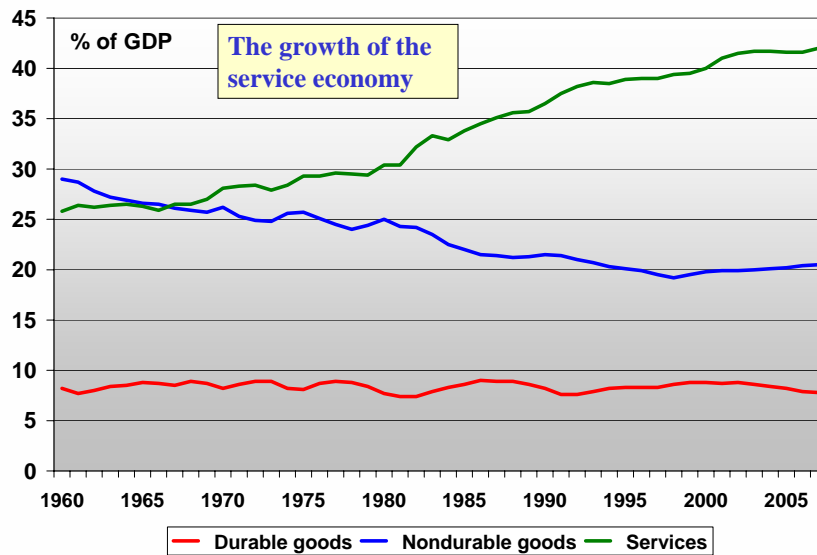


### Real GDP Growth: 1960-2008e

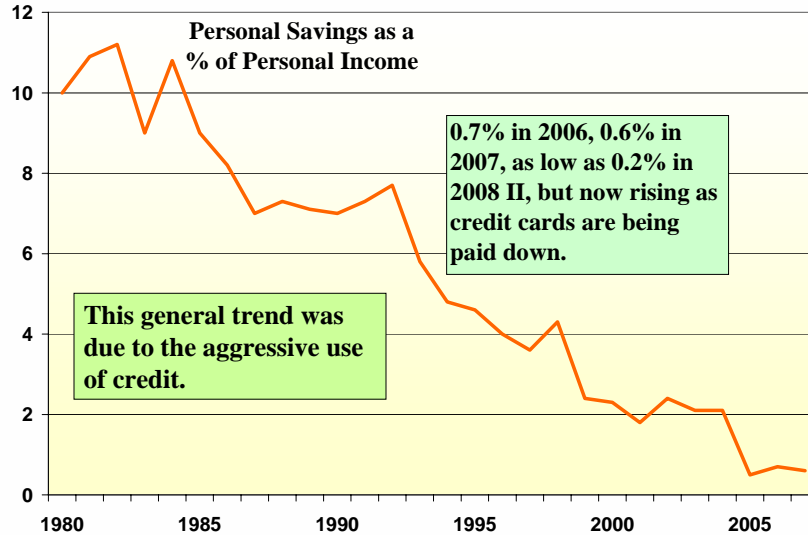


2009 is severely slowing, a bad recession.

### Significant Trends in Consumption



## We don't save



## About savings

- **Personal savings** is equal to gross personal savings less new consumer debt (which explains how it can be negative)
- Personal savings quarterly turned negative for the first time in 2005.
- We have high levels of gross personal savings in the form of **institutional savings** 401Ks, IRAs, other retirement vehicles, and fairly high **discretionary savings** by upper-income individuals.
- We have high levels of business savings in the U.S. and very high levels of "global savings" overseas.
- Teacher's initial comments on the connection of this to "ocean of liquidity."

## Certain conclusions

1. This is a consumption-driven economy
2. We import a lot more than we export
3. Economic growth has been robust, about 3.4%
  - ... but not this year (2008-2009).
4. The bulk of national income is in wages and salaries
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## What's next

- President Obama's expensive stimulus package will be judged on whether it turns around the trends that you have just seen.
- The size of that package, at around \$700 billion, is equal to about 5% of GDP, so it *should stimulate some!*
- As we will see, the real issue will be the long-term financial cost and effect of this scale of borrowing by the U.S. Government.
- Our next lecture will explore why these NIPA accounts cycle.