

Introduction to Macroeconomics

Course overview



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Remember ...

- Reading assignments and exam dates are found at <http://www2.hmc.edu/~evans/e53cc.html>
- High-quality pdfs of these slides are at <http://www2.hmc.edu/~evans/e53ls.htm>
- If looking for material for any of my classes, always go back to source <http://www2.hmc.edu/~evans/hmcgre.html>
- I don't use Sakai for this class

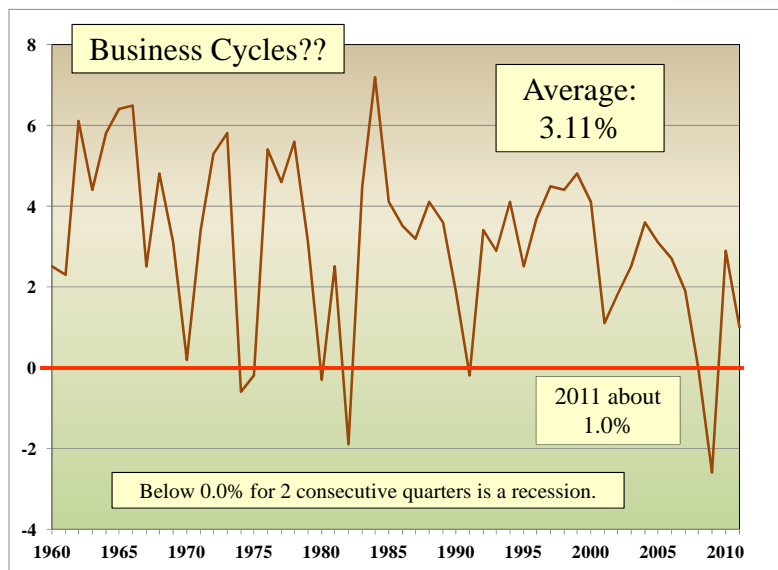
Macroeconomics (review outline and calendar)

1. Reading and reviewing
 - ✓ .. no texts, all online
 - ✓ .. all slides posted online prior to the lecture, no hard copies offered any longer
2. Exams and grades
 - ✓ .. 3 exams, equally weighted, new material only
 - ✓ .. grades on generous distribution
 - ✓ .. no homework
3. Policy
 - ✓ .. attendance not required, but this **is** a lecture course
 - ✓ .. no videos or recordings without permission
 - ✓ .. P/NC etc. review the rules!

Typical macroeconomic questions:

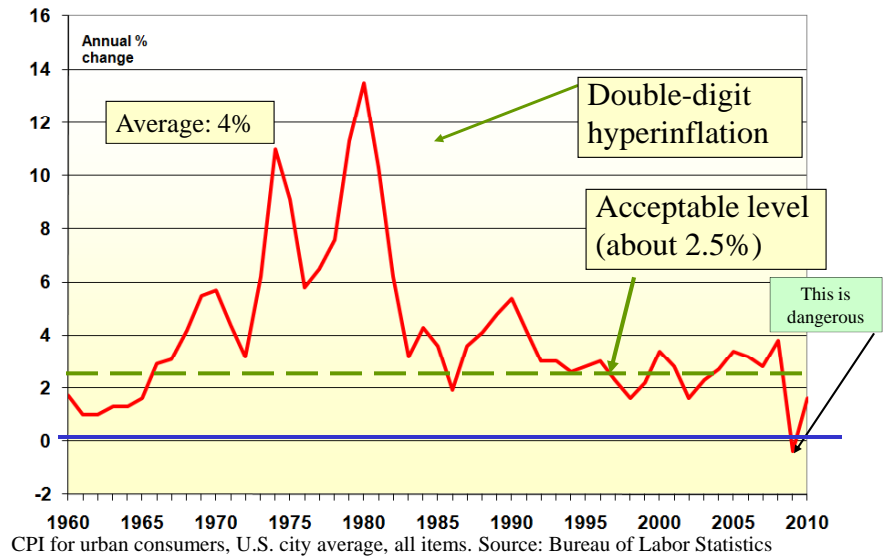
- What caused the recent recession?
- What causes inflation?
- What determines interest rates?
- Why do exchange rates fluctuate?
- What causes unemployment?
- What is our international competitive position?

Real GDP Growth: 1960-2011

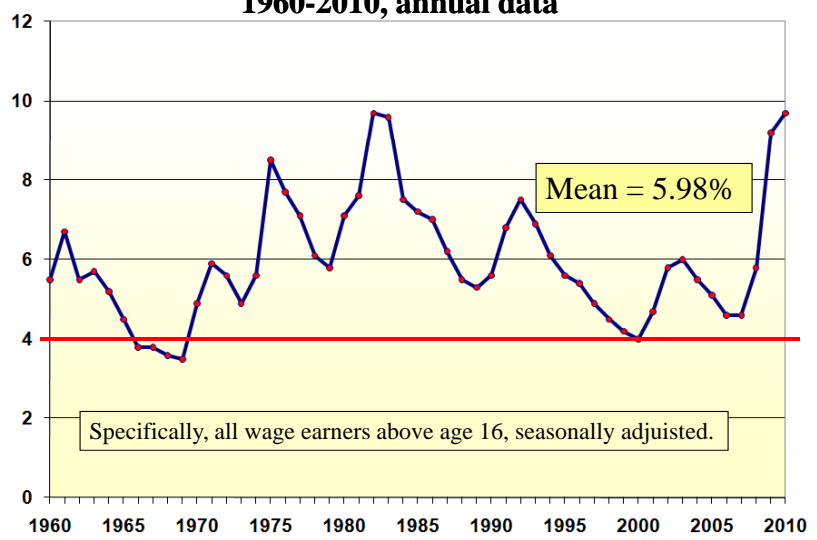


Source: Bureau of Economic Analysis, National Income and Product Accounts

CPI Inflation Rate: 1960-2010



Unemployment Rate 1960-2010, annual data



Source: Bureau of Labor Statistics, Table LNS14.

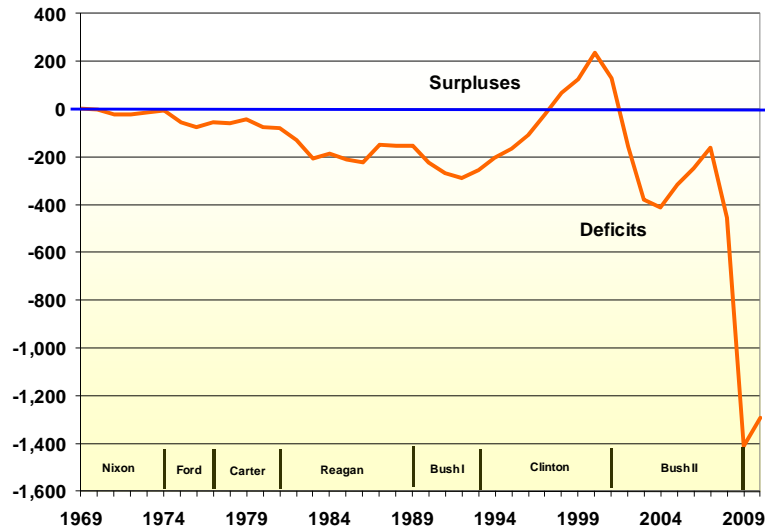
Dollar to Euro Exchange Rate

... the cost of a Euro in \$\$, 2002 to 1-2011, monthly



Source: Federal Reserve Data Download Program, G.5/H.10 Foreign Exchange Rates

U.S. Government Budget Surpluses and Deficits 1969 - 2010



Source: Budget of the United States Government, Fiscal Year 2012, Historical Tables, Table 1.1

Topical Issues early 2011

- Will the recession return (double dip)?
- When will unemployment decline?
- What are we doing to do about this budget deficit?
- What is the long run cost of govt. policy?
- What will interest rates do in the future?
- Are we getting good political leadership?
- What is the future of Social Security and Medicare?
- What are the global dimensions of this – is Europe going to fall and drag us down?

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The National Income and Product Accounts (NIPA)



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

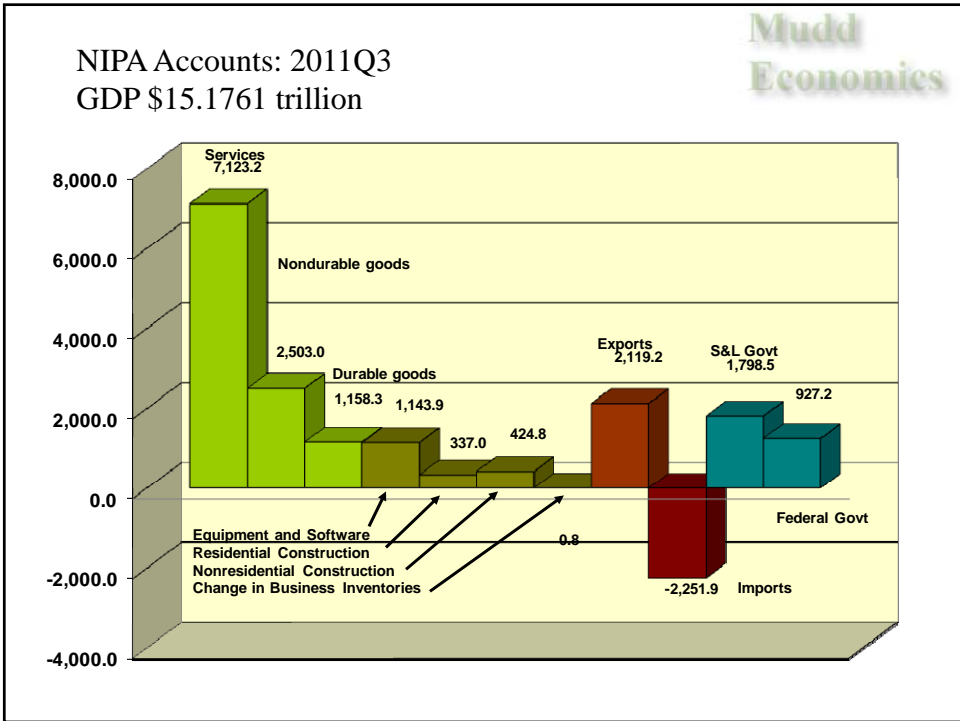
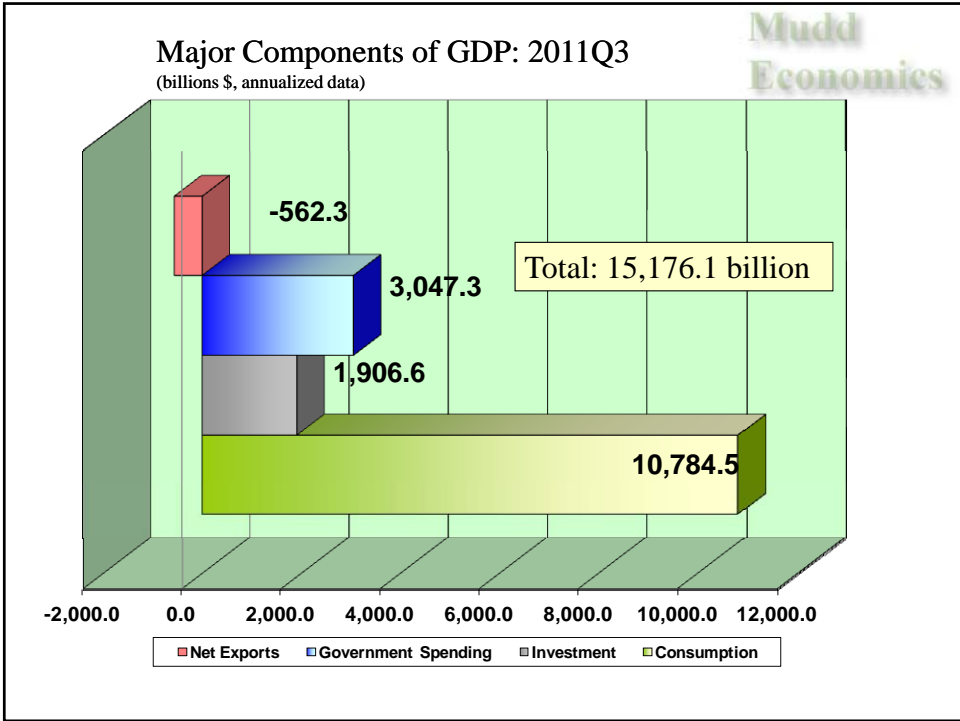
What I intend to show ...

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 in the last few years (2008-2011).
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 large printout of this same chart ...

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

Line	2004	2005	2006	2007	2008	2009	2010	2011Q3	(nominal) % growth	% tot
1 Gross domestic product	11,853.3	12,623.0	13,377.2	14,028.7	14,291.5	13,939.0	14,526.5	15,176.1	6.0	100.0%
2 Personal consumption expenditures	8,270.6	8,803.5	9,301.0	9,772.3	10,035.5	9,866.1	10,245.5	10,784.5	7.0	71.1%
3 Goods	2,892.1	3,076.7	3,224.7	3,363.9	3,381.7	3,197.5	3,387.0	3,661.2	10.8	24.1%
4 Durable goods	1,072.9	1,123.4	1,155.0	1,188.4	1,108.9	1,029.6	1,085.5	1,158.3	8.9	7.6%
5 Nondurable goods	1,819.3	1,953.4	2,069.8	2,175.5	2,272.8	2,167.8	2,301.5	2,503.0	11.7	16.5%
6 Services	5,378.3	5,728.8	6,076.3	6,408.3	6,653.8	6,668.7	6,858.5	7,123.2	5.1	48.9%
7 Gross private domestic investment	1,968.6	2,172.3	2,327.1	2,295.2	2,087.6	1,546.8	1,795.1	1,906.6	8.3	12.6%
8 Fixed investment	1,503.8	2,122.3	2,267.2	2,266.1	2,128.7	1,707.6	1,728.2	1,905.8	13.7	12.6%
9 Nonresidential	1,223.0	1,347.3	1,505.3	1,637.5	1,656.3	1,353.0	1,390.1	1,568.7	17.1	10.3%
10 Structures	306.7	351.8	433.7	524.9	586.3	449.9	374.4	424.8	17.9	2.8%
11 Equipment and software	916.4	995.6	1,071.7	1,112.6	1,070.0	903.0	1,015.7	1,143.9	16.8	7.5%
12 Residential	680.6	775.0	761.9	628.7	472.4	354.7	338.1	337.0	-0.4	2.2%
13 Change in private inventories	64.9	50.0	60.0	29.1	-41.1	-160.8	66.9	0.8	-131.7	0.9%
14 Net exports of goods and services	-818.7	-722.7	-769.3	-713.1	-709.7	-391.5	-516.9	-562.3	11.7	-3.7%
15 Exports	1,180.2	1,305.1	1,471.0	1,661.7	1,846.8	1,583.0	1,839.8	2,119.2	20.2	14.0%
16 Goods	817.0	906.1	1,024.4	1,162.0	1,297.5	1,064.7	1,277.8	1,496.6	22.8	9.9%
17 Services	363.2	399.0	446.6	499.7	549.3	518.4	562.0	622.6	14.4	4.1%
18 Imports	1,798.9	2,027.8	2,240.3	2,374.8	2,556.5	1,974.6	2,356.7	2,681.6	18.4	17.7%
19 Goods	1,501.7	1,708.0	1,884.9	2,000.7	2,146.3	1,587.3	1,947.3	2,251.9	20.9	14.8%
20 Services	297.3	319.8	355.4	374.0	410.1	387.3	409.4	429.7	6.6	2.8%
21 Government consumption expenditures & investment	2,232.8	2,369.9	2,518.4	2,674.2	2,878.1	2,917.5	3,002.8	3,047.3	2.0	20.1%
22 Federal	824.6	876.3	931.7	976.3	1,080.1	1,142.7	1,222.8	1,248.9	2.8	8.2%
23 National defense	550.9	589.0	624.9	662.3	737.8	774.9	819.2	844.0	4.0	5.6%
24 Nondefense	273.9	287.3	306.8	314.0	342.3	367.8	403.6	404.9	0.4	2.7%
25 State and local	1,408.2	1,493.6	1,586.7	1,697.9	1,798.0	1,774.8	1,780.0	1,798.5	1.4	11.9%

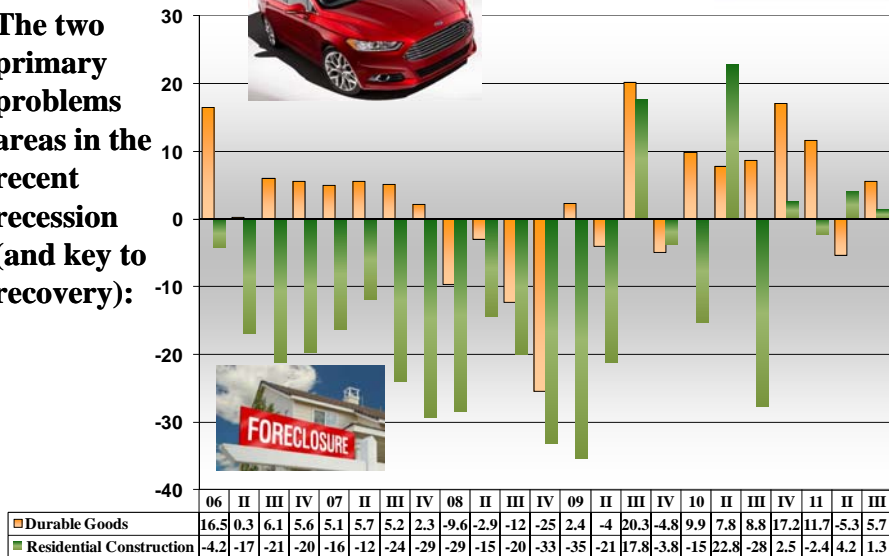
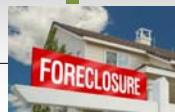


These NIPA categories

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- **Real GDP** adjusts monetary GDP by removing inflation (the data are deflated by statistics called the **chain-type price indexes**).
- **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 two primary problems areas in the recent recession (and key to recovery):



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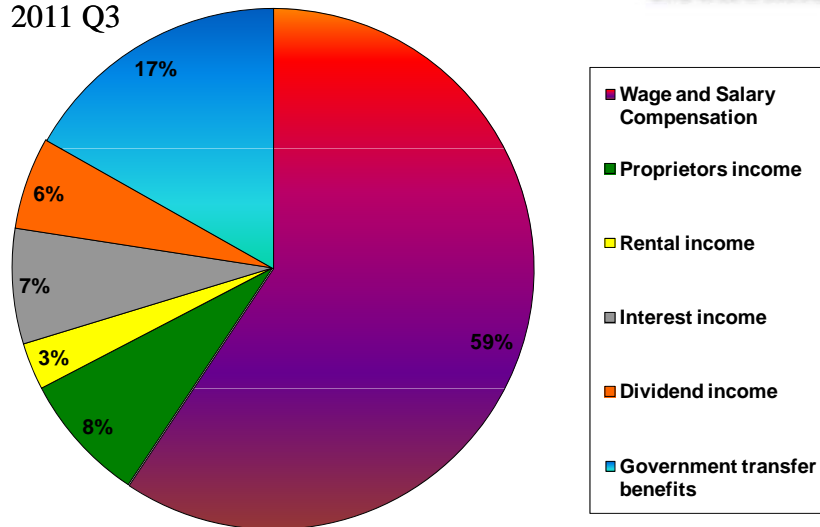
The Statistical Difference Between GDP and National Income

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

Gross Domestic Product

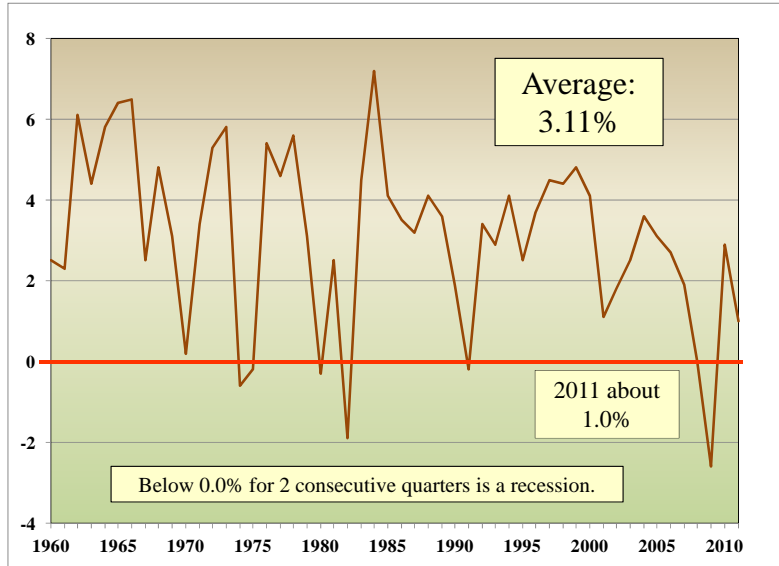
- plus Receipts of overseas income
- less Payments to overseas income
- equals Gross National Product
- less Consumption of Fixed Capital
- equals Net National Product
- less Indirect Business Taxes and Tax Liability
- less Business Transfer Payments
- less Statistical Discrepancy
- plus Subsidies less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

National Income and its Disposition:
2011 Q3



Real GDP Growth: 1960-2011

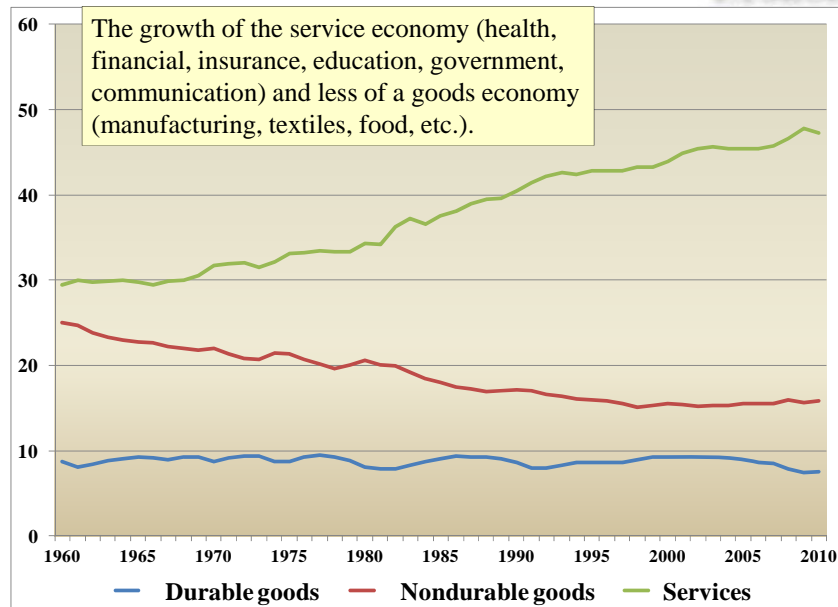
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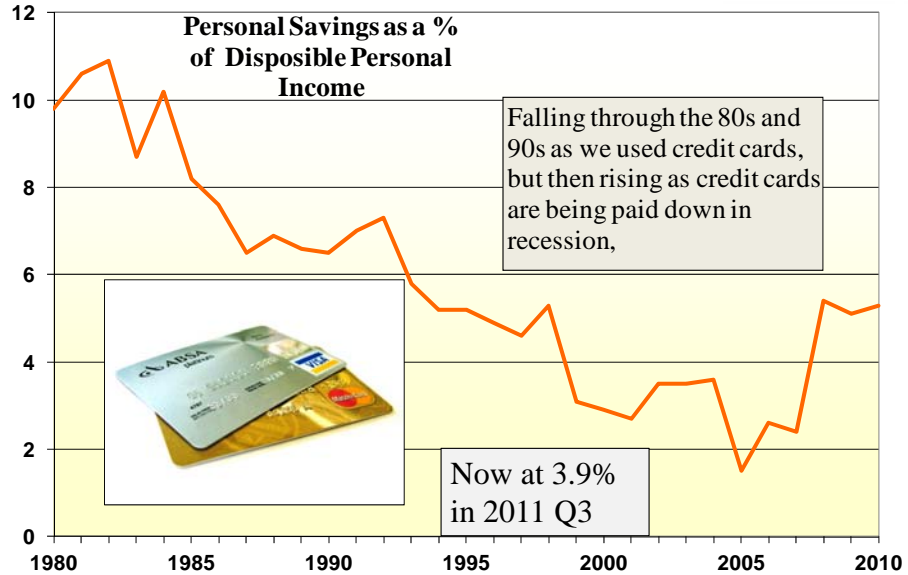
Source: Bureau of Economic Analysis, National Income and Product Accounts

Significant Trends in Consumption

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We don't save (much)



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 between this and short-term recovery with long-term problems.

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
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).

What's next

- You know that we are barely staying out of a recession and you probably know that the fiscal and monetary stimulus package is huge.
- The total size of the stimulus package is about \$2-\$4 trillion (depending upon what you count) 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**.

Additional information ...

“A Guide to the National Income and Product Accounts of the United States,”
Bureau of Economic Analysis, Sept. 2006. Detailed description of NIPA accounts
and appendix about how chain-price indexes are constructed.
<http://www.bea.gov/national/pdf/nipaguid.pdf>

*“Measuring the Economy: A Primer on GDP and the National Income
Accounts,”* Bureau of Economic Analysis, Sept. 2007. Has more about how to
obtain the data. http://www.bea.gov/national/pdf/nipa_primer.pdf

“Taking the Pulse of the Economy: Measuring GDP,” Landefeld, Seskin, &
Fraumeni, *Journal of Economic Perspectives*, Spring 2008. Detailed description
of methods and NIPA classifications. Available on the BEA site at
http://www.bea.gov/about/pdf/jep_spring2008.pdf