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.

Topical: Natural Gas and Propane prices soar ...

Source: Energy Information Administration, data are from reports released Jan 23, 2014.
... massive inventory drawdown due to record-setting cold weather

The “polar vortex” in early January pushed temperatures in the East to record lows ...

... which in turn caused a huge drawdown in seasonal natural gas inventories.

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 (2008-2013).
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 ...

Major Components of GDP: 2013Q3
(billions $, annualized data)
These NIPA categories

- **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):

Data shown are annualized quarterly growth rates of durable goods and residential construction, 2006-I to 2013-III

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: 2013 Q3

Wage and Salary Compensation: 53%
Proprietors income: 10%
Rental income: 6%
Interest income: 6%
Dividend income: 4%
Government transfer benefits: 9%

Real GDP Growth: 1960-2012

Average: 3.1%
2013 Q1-Q3: 1.1%, 2.5%, 4.1%

Below 0.0% for 2 consecutive quarters is a recession.

Source: Bureau of Economic Analysis, National Income and Product Accounts
Significant Trends in Consumption

The growth of the service economy (health, financial, insurance, education, government, communication) and less of a goods economy (manufacturing, textiles, food, etc.).

We don't save (much)

Falling through the 80s and 90s as we used credit cards, but then rising as credit cards were being paid down in recession. This is a key "recovery" variable.

Now at 3.6% in 2012 Q3
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 much lower since 2005.
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 will 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 ...


<table>
<thead>
<tr>
<th>Line</th>
<th>Category</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013Q3</th>
<th>% growth 2012</th>
<th>% tot</th>
</tr>
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<tbody>
<tr>
<td>1</td>
<td>Gross domestic product</td>
<td>13,857.9</td>
<td>14,480.3</td>
<td>14,720.3</td>
<td>14,417.9</td>
<td>14,958.3</td>
<td>15,533.8</td>
<td>16,244.6</td>
<td>16,912.9</td>
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<td>100.0%</td>
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<td>2</td>
<td>Personal consumption expenditures</td>
<td>9,297.5</td>
<td>9,744.4</td>
<td>10,005.5</td>
<td>9,842.9</td>
<td>10,201.9</td>
<td>10,711.8</td>
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<td>11,537.7</td>
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<td>68.2%</td>
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<td>3</td>
<td>Goods</td>
<td>3,235.8</td>
<td>3,361.6</td>
<td>3,375.7</td>
<td>3,198.4</td>
<td>3,362.8</td>
<td>3,602.7</td>
<td>3,769.7</td>
<td>3,912.8</td>
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<td>23.1%</td>
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<td>4</td>
<td>Durable goods</td>
<td>1,156.1</td>
<td>1,184.6</td>
<td>1,102.3</td>
<td>1,023.3</td>
<td>1,070.7</td>
<td>1,129.9</td>
<td>1,202.7</td>
<td>1,274.0</td>
<td>6.4</td>
<td>7.5%</td>
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<td>Non-durable goods</td>
<td>2,079.7</td>
<td>2,176.9</td>
<td>2,273.4</td>
<td>2,175.1</td>
<td>2,292.1</td>
<td>2,472.8</td>
<td>2,567.0</td>
<td>2,638.8</td>
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<td>15.6%</td>
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<td>6</td>
<td>Services</td>
<td>6,061.7</td>
<td>6,382.9</td>
<td>6,629.8</td>
<td>6,644.5</td>
<td>6,839.1</td>
<td>7,109.1</td>
<td>7,379.9</td>
<td>7,624.8</td>
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<td>45.1%</td>
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<td>Gross private domestic investment</td>
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<td>2,643.7</td>
<td>2,424.8</td>
<td>1,878.1</td>
<td>2,100.8</td>
<td>2,232.1</td>
<td>2,475.2</td>
<td>2,738.0</td>
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<td>16.2%</td>
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<td>Fixed investment</td>
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<td>2,609.3</td>
<td>2,456.8</td>
<td>2,025.7</td>
<td>2,039.3</td>
<td>2,195.6</td>
<td>2,409.1</td>
<td>2,593.2</td>
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<td>15.3%</td>
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<td>Non-residential</td>
<td>1,776.3</td>
<td>1,920.6</td>
<td>1,941.0</td>
<td>1,633.4</td>
<td>1,809.9</td>
<td>1,970.0</td>
<td>2,060.5</td>
<td>8.8</td>
<td>12.2%</td>
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<td>Structures</td>
<td>415.6</td>
<td>496.9</td>
<td>552.4</td>
<td>438.2</td>
<td>362.0</td>
<td>380.6</td>
<td>437.3</td>
<td>470.7</td>
<td>14.9</td>
<td>2.8%</td>
</tr>
<tr>
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<td>Equipment</td>
<td>856.1</td>
<td>885.8</td>
<td>825.1</td>
<td>644.3</td>
<td>731.8</td>
<td>832.7</td>
<td>907.6</td>
<td>935.8</td>
<td>9.0</td>
<td>5.5%</td>
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<tr>
<td>12</td>
<td>Intellectual property products</td>
<td>504.6</td>
<td>537.9</td>
<td>563.4</td>
<td>550.9</td>
<td>564.3</td>
<td>596.6</td>
<td>625.0</td>
<td>654.1</td>
<td>4.8</td>
<td>3.9%</td>
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<tr>
<td>13</td>
<td>Residential</td>
<td>837.4</td>
<td>688.7</td>
<td>515.9</td>
<td>392.2</td>
<td>381.1</td>
<td>385.8</td>
<td>439.2</td>
<td>532.6</td>
<td>13.8</td>
<td>3.1%</td>
</tr>
<tr>
<td>14</td>
<td>Change in private inventories</td>
<td>67.0</td>
<td>34.5</td>
<td>32.0</td>
<td>147.6</td>
<td>61.5</td>
<td>36.4</td>
<td>66.1</td>
<td>144.6</td>
<td>81.6</td>
<td>0.9%</td>
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<tr>
<td>15</td>
<td>Net exports of goods and services</td>
<td>(762.4)</td>
<td>(709.8)</td>
<td>(713.2)</td>
<td>(392.2)</td>
<td>(518.5)</td>
<td>(568.7)</td>
<td>(542.7)</td>
<td>(500.2)</td>
<td>-3.8</td>
<td>-3.0%</td>
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<tr>
<td>16</td>
<td>Exports</td>
<td>1,478.5</td>
<td>1,665.7</td>
<td>1,843.1</td>
<td>1,583.8</td>
<td>1,843.5</td>
<td>2,101.2</td>
<td>2,195.9</td>
<td>2,265.8</td>
<td>4.5</td>
<td>13.4%</td>
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<tr>
<td>17</td>
<td>Goods</td>
<td>1,048.1</td>
<td>1,165.3</td>
<td>1,297.6</td>
<td>1,064.7</td>
<td>1,278.4</td>
<td>1,473.6</td>
<td>1,536.0</td>
<td>1,572.1</td>
<td>4.2</td>
<td>9.3%</td>
</tr>
<tr>
<td>18</td>
<td>Services</td>
<td>430.4</td>
<td>500.4</td>
<td>545.5</td>
<td>519.1</td>
<td>565.1</td>
<td>627.6</td>
<td>659.9</td>
<td>693.7</td>
<td>5.1</td>
<td>4.1%</td>
</tr>
<tr>
<td>19</td>
<td>Imports</td>
<td>2,240.9</td>
<td>2,375.5</td>
<td>2,556.4</td>
<td>1,976.0</td>
<td>2,362.0</td>
<td>2,669.9</td>
<td>2,743.1</td>
<td>2,766.0</td>
<td>2.7</td>
<td>16.4%</td>
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<tr>
<td>20</td>
<td>Goods</td>
<td>1,896.5</td>
<td>2,000.3</td>
<td>2,146.4</td>
<td>1,587.3</td>
<td>1,951.2</td>
<td>2,234.6</td>
<td>2,295.4</td>
<td>2,304.5</td>
<td>2.7</td>
<td>13.6%</td>
</tr>
<tr>
<td>21</td>
<td>Services</td>
<td>344.5</td>
<td>375.3</td>
<td>410.0</td>
<td>388.7</td>
<td>410.8</td>
<td>435.3</td>
<td>447.7</td>
<td>461.5</td>
<td>2.8</td>
<td>2.7%</td>
</tr>
<tr>
<td>22</td>
<td>Government consumption expenditures and gross investment</td>
<td>2,642.2</td>
<td>2,801.9</td>
<td>3,003.2</td>
<td>3,088.1</td>
<td>3,174.0</td>
<td>3,158.7</td>
<td>3,167.0</td>
<td>3,137.5</td>
<td>0.3</td>
<td>18.6%</td>
</tr>
<tr>
<td>23</td>
<td>Federal</td>
<td>1,002.0</td>
<td>1,049.8</td>
<td>1,155.6</td>
<td>1,217.7</td>
<td>1,303.9</td>
<td>1,340.1</td>
<td>1,295.7</td>
<td>1,251.2</td>
<td>-0.6</td>
<td>7.4%</td>
</tr>
<tr>
<td>24</td>
<td>National defense</td>
<td>642.4</td>
<td>678.7</td>
<td>754.1</td>
<td>789.3</td>
<td>832.8</td>
<td>835.8</td>
<td>817.1</td>
<td>777.3</td>
<td>-2.2</td>
<td>4.6%</td>
</tr>
<tr>
<td>25</td>
<td>Nondefense</td>
<td>359.6</td>
<td>371.0</td>
<td>410.5</td>
<td>429.4</td>
<td>471.1</td>
<td>468.2</td>
<td>478.6</td>
<td>473.9</td>
<td>2.2</td>
<td>2.8%</td>
</tr>
<tr>
<td>26</td>
<td>State and local</td>
<td>1,640.2</td>
<td>1,752.2</td>
<td>1,847.6</td>
<td>1,871.4</td>
<td>1,870.2</td>
<td>1,854.7</td>
<td>1,871.3</td>
<td>1,886.3</td>
<td>0.9</td>
<td>11.2%</td>
</tr>
</tbody>
</table>