Lecture 2: The eschatology of lost decades

Paul Krugman
## Growing surpluses

<table>
<thead>
<tr>
<th>Region</th>
<th>2000</th>
<th>2007</th>
</tr>
</thead>
<tbody>
<tr>
<td>Developing Asia</td>
<td>38.6</td>
<td>406.5</td>
</tr>
<tr>
<td>Newly Industrialized</td>
<td>38.9</td>
<td>103.6</td>
</tr>
<tr>
<td>Middle East</td>
<td>71.9</td>
<td>254.1</td>
</tr>
<tr>
<td>Japan</td>
<td>119.6</td>
<td>211</td>
</tr>
<tr>
<td>Germany</td>
<td>-32.6</td>
<td>250.3</td>
</tr>
<tr>
<td>Total</td>
<td>236.4</td>
<td>1225.5</td>
</tr>
</tbody>
</table>
European current accounts ($billion)

- Germany
- Ireland
- Portugal
- Greece
- United Kingdom
- Spain

2001 2002 2003 2004 2005 2006 2007
Household debt as % of GDP
Lending, borrowing

Future repayment

Slope = 1+r

Lenders

Borrowers

Lending, borrowing
Lending, borrowing
Future repayment
Constraint
Slope = 1+r
Lenders
Borrowers
Lending, borrowing
Employment cycles
Civilian Employment-Population Ratio (EMRATIO)

Shaded areas indicate US recessions.
2009 research.stlouisfed.org
Interest rate at start of recession
Runup change in interest rate

- 1969
- 1973
- 1980
- 1981
- 1990
- 2001
- 2007
Personal Consumption Expenditures: Chain-type Price Index Less Food and Energy (JCXFE)

Shaded areas indicate US recessions.
2009 research.stlouisfed.org
The textbook adjustment process

Price level

LRAS

SRAS₁

SRAS₂

AD

Output
But in the liquidity trap, it probably looks like this ...
Historically, recovery from financial-crisis-led recessions has been export-led.
Japan’s recovery: export-driven
THE RECOVERY FROM THE GREAT PANIC OF 1873

Roger W. Babson, the Well-known Statistician, Tells of the Business Epochs That Followed That Period of Depression.

Prices of Investment Stocks and Bonds from 1870 to 1911.

This is a plot of relative price movement of ten representative high-grade stocks and five representative high-grade bonds. The basis of the action and reaction is the same. The average and the standard deviation are used to illustrate the results. It shows that the recovery from the panic of 1873 was gradual. After several years of decline, there was a slow but steady recovery. The panic of 1884 was much more severe, and the recovery was slower and more prolonged. The panic of 1893 was even more severe, and the recovery was even more prolonged. The panic of 1907 was the most severe, and the recovery was the most prolonged. The panic of 1929 was the most severe, and the recovery was the most prolonged.
So how does it end?

Keynesian business cycle theory:

“use, decay, and obsolescence”

Koosian theory: rebuilding the balance sheets
Use, decay, and obsolescence:

US stock of autos: 135 million

May 2009 auto sales: 484,000

Annual rate of 6 million?

If so, more than 20 years to replace stock ...
Source: Richard Koo
Noncorporate debt as % of GDP

US entry into war

Start of depression
Federal debt as % of GDP
10-Year Treasury Inflation-Indexed Security, Constant Maturity (WFII10)

Shaded areas indicate US recessions.
2009 research.stlouisfed.org
Japanese debt and interest

Source: OECD