Evidence for the Quantity Theory

Data Sets
- International Data
- International Hyperinflations
- American Data

Inflation Rates for 100 Countries

\[
\frac{\Delta P}{P} = \frac{\Delta M}{M} - \frac{\Delta Y}{Y}
\]
If \( \frac{\Delta P}{P} = 0 \),

\[
\frac{\Delta M}{M} = \frac{\Delta Y}{Y}
\]
The German Hyperinflation

Evidence for the Quantity Theory

<table>
<thead>
<tr>
<th>Date</th>
<th>Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>July 1914</td>
<td>1.0</td>
</tr>
<tr>
<td>Jan 1919</td>
<td>2.6</td>
</tr>
<tr>
<td>July 1919</td>
<td>3.4</td>
</tr>
<tr>
<td>Jan 1920</td>
<td>12.6</td>
</tr>
<tr>
<td>Jan 1921</td>
<td>14.4</td>
</tr>
<tr>
<td>July 1921</td>
<td>14.3</td>
</tr>
<tr>
<td>Jan 1922</td>
<td>36.7</td>
</tr>
<tr>
<td>July 1922</td>
<td>100.6</td>
</tr>
<tr>
<td>Jan 1923</td>
<td>2,785.0</td>
</tr>
<tr>
<td>July 1923</td>
<td>194,000.0</td>
</tr>
<tr>
<td>Nov 1923</td>
<td>726,000,000,000.0</td>
</tr>
</tbody>
</table>

Evidence for the Quantity Theory

August 1923

Evidence for the Quantity Theory

50,000,000 Marks

Evidence for the Quantity Theory

You think lines are long now?
Evidence for the Quantity Theory

The German Hyperinflation

The Austrian Hyperinflation

The Hungarian Hyperinflation

The Polish Hyperinflation

Conclusions

Price level and money supply go hand in hand. When money supply stops growing, price level stops growing.
Evidence for the Quantity Theory

More US Data

Inflation and Growth

Money is Neutral

Well Sort of Neutral

\[ \frac{\Delta V}{V} = 0 \]
Conclusions

The Quantity Theory of Money works pretty well but there are qualifications.