The Economics of Keynes

The Keynesian System (I):
The Role of Aggregate Demand
Great Depression (1)

<table>
<thead>
<tr>
<th>Year</th>
<th>U.S. Unemployment Rate</th>
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<tbody>
<tr>
<td>1929</td>
<td>3.2%</td>
</tr>
<tr>
<td>1930</td>
<td>8.7%</td>
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<tr>
<td>1931</td>
<td>15.9%</td>
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<tr>
<td>1932</td>
<td>23.6%</td>
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<tr>
<td>1933</td>
<td>24.9%</td>
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<tr>
<td>1939</td>
<td>17.2%</td>
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Great Depression (2)

- **General Conditions**
  - GNP fell 30% from 1929-1933
  - Gov’t Tax Revenues fell 50%
    - Hoover raised highest marg. tax rates from 25% to 63%, making the 2.5 times higher!
  - By 1933, machine tool orders were 1/8 their 1929 level
  - More than 9,000 banks closed
  - Factories and mines were closed down, towns went bankrupt and were abandoned
Great Depression (3)

- **Prices**
  - GNP Deflator fell 24% from 1929-1933
  - Farm Product Prices fell 50%
  - Crude oil was 5 cents per barrel

- **Financial Markets**
  - Interest Rates fell
  - Equivalent Dow Jones Average = 300
“\textit{I believe myself to be writing a book on economic theory which will largely revolutionize—not, I suppose, at once but in the course of the next ten years—the way the world thinks about economic problems.}”

\textit{-- John Maynard Keynes}
The Early J. M. Keynes

- Born in 1883 in Cambridge, England
- Son of John Neville Keynes
  - Neville was a professor of Economics and Logic at Cambridge Univ., and wrote on Economic Methodology
- Won a scholarship to Eton
- Boy Genius
  - Won prizes for his work in the classics, mathematics, history, English essays
  - Wrote papers on contemporary social problems, participated in crew and debate, acted, read everything
  - Became an expert in medieval latin poetry
- Part of Eton’s social elite
- Won a scholarship to King’s College, Cambridge
Keynes as a College Student

- President of the Student Union
- President of the University Liberal Club
- Rowed, studied philosophy, played bridge, visited art galleries, collected rare books, went to the theatre
- Became a member of the “Apostles”, a secret and highly exclusive Cambridge intellectual society
After Graduation

- Briefly studied economics, but did poorly on his exams.
- Took a civil service exam and took a job at the India Office.
- 1908, his father managed to get him a job as a lecturer at King’s College. Later he became a Fellow.
- 1911, he became editor of the Economic Journal.
- Worked at the Treasury during WWI.
- 1921, he published *A Treatise on Probability.*
After WWI

- Keynes wrote the Economic Consequences of the Peace, regarding reparation payments
  - Best Seller
  - Made him a public celebrity
- 1923 Tract on Monetary Reform (against returning to the pre-war gold standard)
- Economic Consequences of Mr Churchhill (warned of depression)
- 1930 Treatise On Money
- 1936 General Theory of Employment, Interest and Money
- 1937, he has a serious heart attack
Comment by Samuelson

“It is a badly written book, poorly organized; any layman who, beguiled by the author’s previous reputation, bought the book was cheated of his 5 shillings. It is not well suited for classroom use. It is arrogant, bad-tempered, polemical, and not overly-generous in its acknowledgements... In it the Keynesian system stands out indistinctly, as if the author were hardly aware of its existence or cognizant of its properties; and certainly he is at his worst when expounding on its relations to its predecessors. Flashes of insight and intuition intersperse tedious algebra. An awkward definition gives way to an unforgettable cadenza. When it is finally mastered, we find its analysis to be obvious and at the same time new. In short, it is the work of genius.”
1. If the consumer is an economic optimizer, he/she must be unable to buy the goods they planned to buy because of some kind of constraint—risk, convention, social institutions, cash, or ...?
   a) According to the classical model, the consumer has insatiable wants.
   b) The consumer sells his/her labor in exchange for enough income to buy the goods.
   c) The money value of the incomes received must be equal to the value of the output produced.
   d) So how can unsold goods pile up in warehouses, causing firms to lay off workers?
Keynes’ Vision (2)

2. **Say’s Law cannot hold.** ("Supply creates its own demand.")
   
a) If spending constraints are in effect, then there will be a difference between (unlimited) demand and "effective demand".

b) Actual (effective) demand will usually be "deficient" to purchase total output.
3. Microeconomics and macroeconomics do not operate on the same basis. One cannot assume that what is true for the economic agent at the level of the individual consumer or firm is true in aggregate. This amounts to the fallacy of composition.

- In microeconomics, relative price effects dominate. This is not true in macroeconomics. In macroeconomics, income effects dominate, making income more important in determining aggregate economic behavior.
4. Therefore, consumption depends primarily upon income, not interest rates.
   - $C \neq C(r)$, but rather $C = C(Y)$
   - “People don’t change their standard of living simply because the interest rate changes a few points.”
5. Saving occurs as the result of a habit, convention, or social norm. People on average set aside a certain percentage of their income. Saving is not a function of interest rates.
   - $S \neq S(r)$, but rather $S = S(Y)$

6. Investment is related to interest rates, but also to businesspeople’s expectations for the future.
   - That is, $I = I(r,E)$. 
7. If $S = S(Y)$ and $I = I(r,E)$, then there is no coordinating variable to bring supply and demand together in the loanable funds (capital) market.

- There is no reason to assume that supply equals demand in this market.
- There is no reason to believe that there will be adequate funds available to provide adequate investment demand.
- Since $\text{AD} = C + I + G + \text{NX}$, if investment demand is deficient, then $\text{AD} < \text{AS}$, and inventories may pile up, with unemployment a natural outcome.
- Without the coordinating variable, this will be the normal outcome, with $\text{AD} = \text{AS}$ only happening accidentally.
Keynes’ Vision (7)

8. Investment is a large and long-term commitment, and is based on weakly supported expectations about the future. This makes investment very different from consumption. Investment decisions will be erratic and emotional, and the risks associated with investment are very high. As a result, business decision makers will tend to under-invest, further worsening the problem of deficient investment.
9. It may be a natural outcome of the organization and institutions of modern economies that prices and wages may not be fully flexible. This would result in markets (like the labor and goods markets) being unable to clear, leading to unemployment and aggregate supply exceeding demand.
10. Money plays a key role in the economy. The use of money leads to uncertainty, and makes “piercing the veil” impossible. A money economy is fundamentally different from a barter economy. The classical dichotomy cannot hold.
   - Interest rates are established in the money market.
   - People may rationally hoard money, holding money for purposes other than making transactions.

11. Equilibrium is not $AD = AS$. It is a state that persist.