202 Week 5

- THE CLASSICAL MODEL & THE GREAT DEPRESSION

The Classical Model

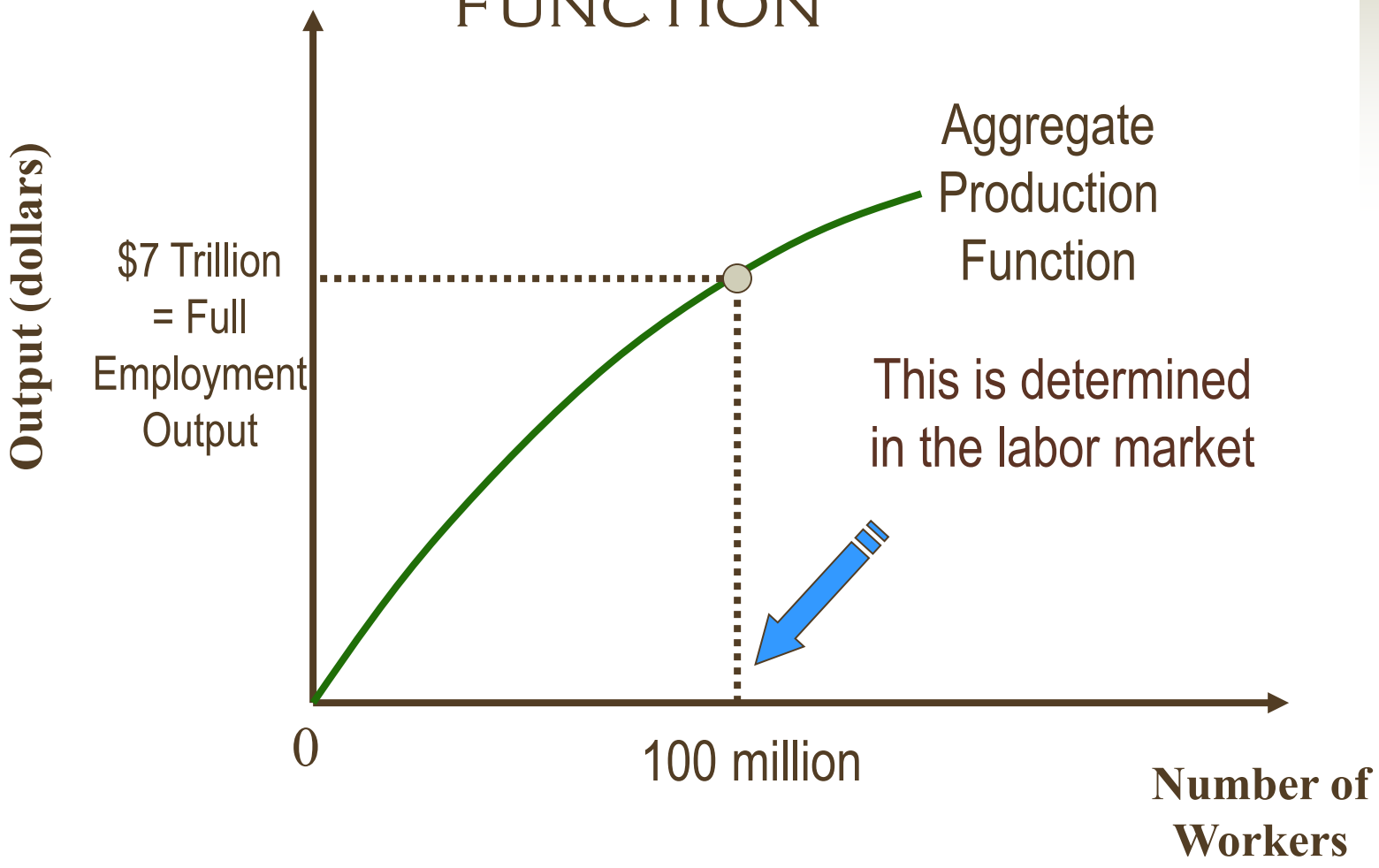
- **Explaining the Depression**
  - According to Classical economists, the Depression was caused by a problem in the labor market.
  - To understand this explanation – need to understand link between the labor market and aggregate output (GDP).

Explaining the Depression

The Aggregate Production Function

- Shows the relationship between **total output** (or real GDP) and **employment**, holding all other factors constant
- Factors held constant include:
  - Land,
  - capital
  - technology

The Aggregate production function



The Classical Labor Market

Labor supply:

work-leisure trade-off.

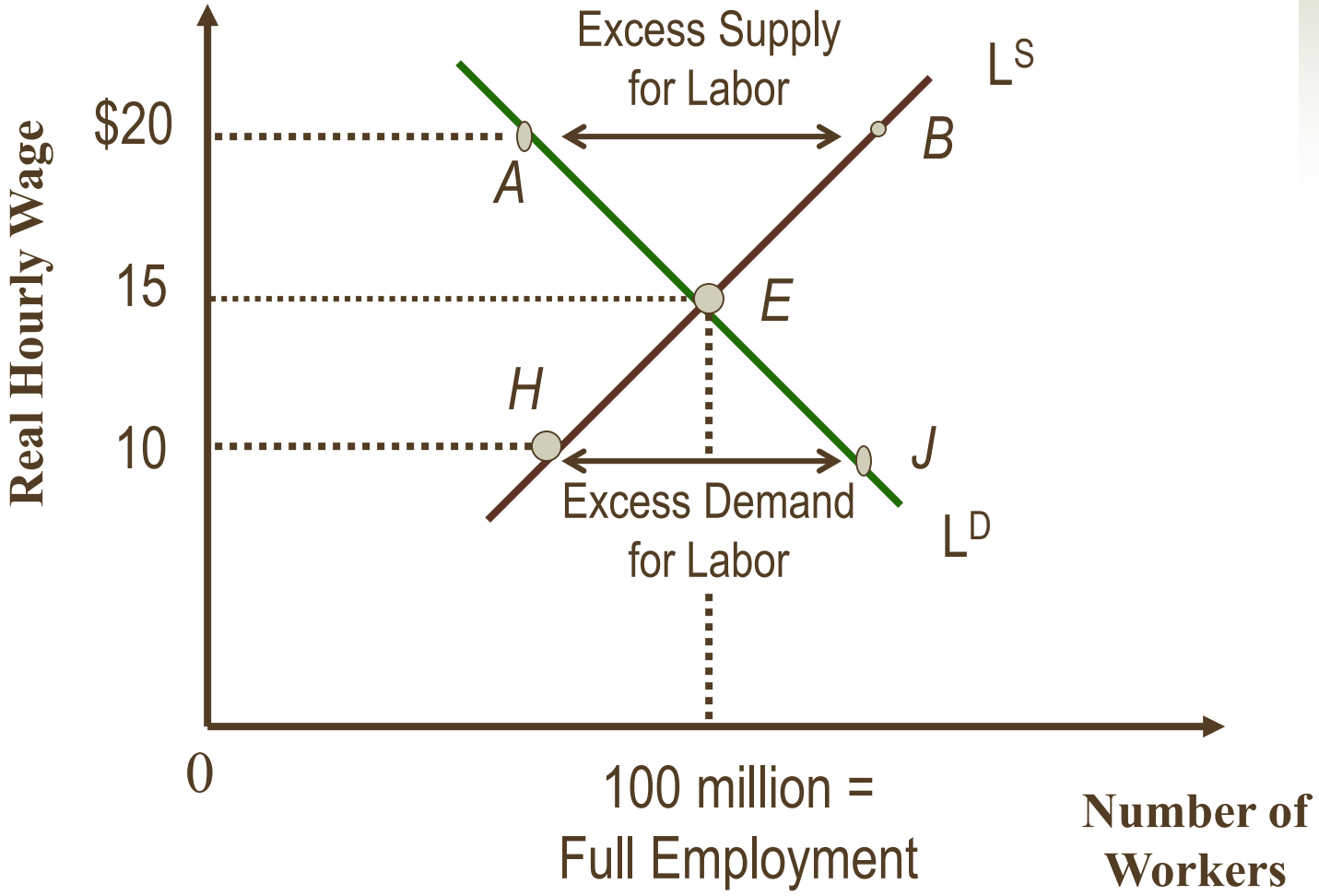
As the real wage increases, the opportunity cost of leisure rises as well. Hence, people substitute work for leisure.

Labor demand:

Profit maximization

Firms hire workers as long as value of marginal product is equal to or greater than wage.

The Classical Labor Market



The Classical Labor Market

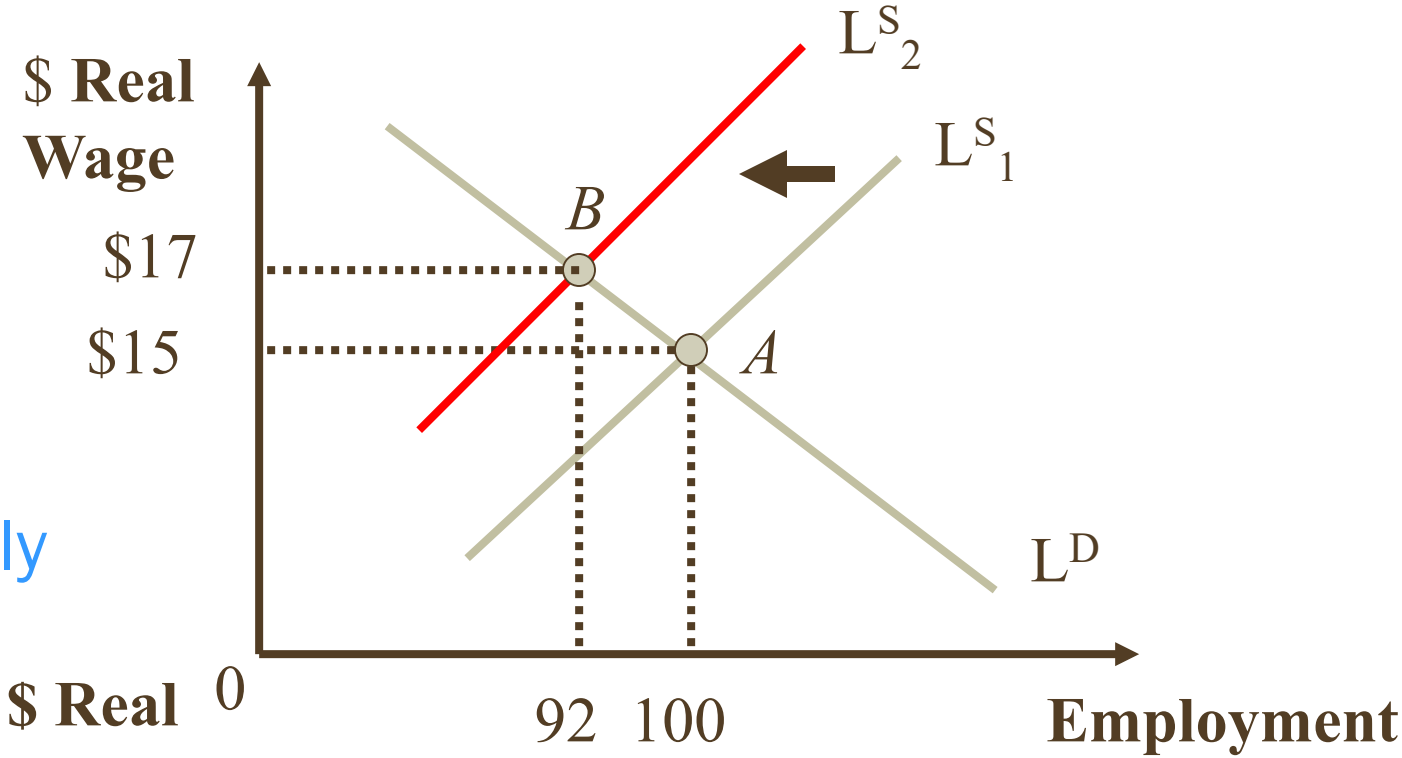
- According to the Classical view, the economy will achieve full employment *naturally*—--i.e., on its own.

Explaining the Depression

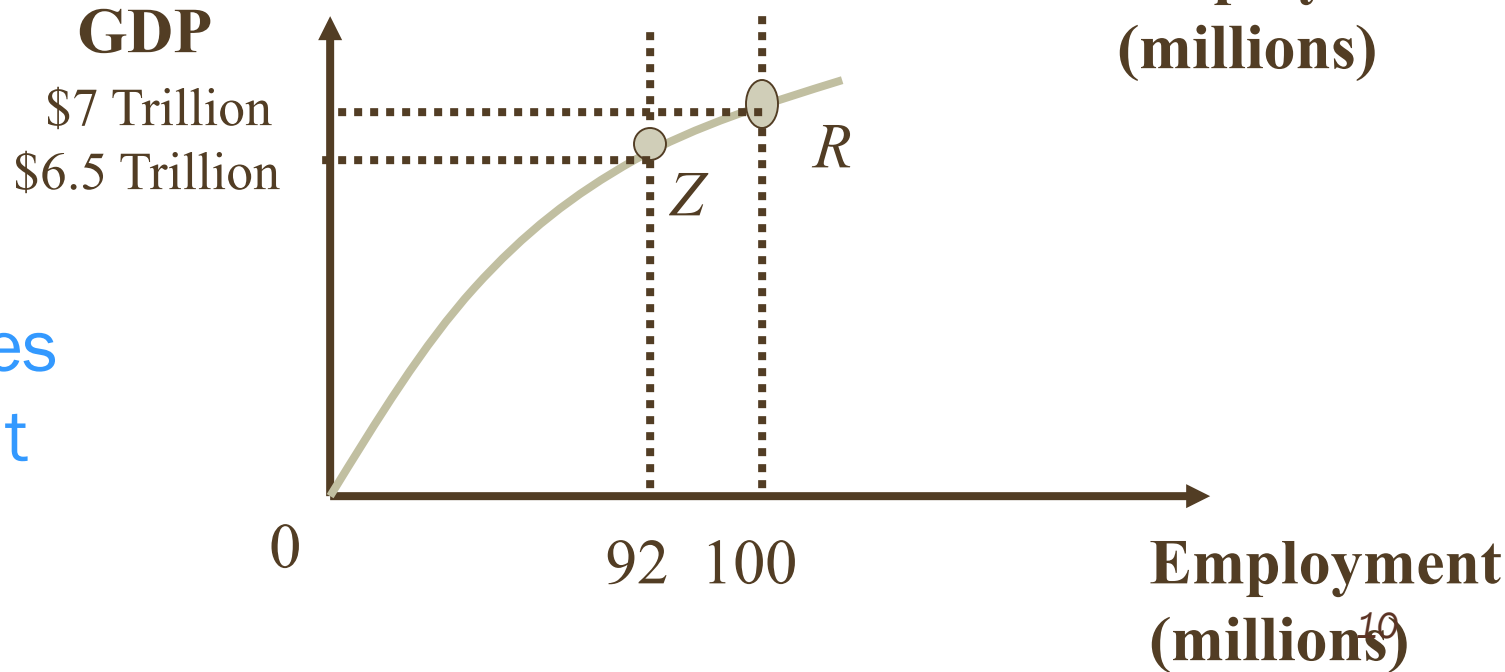
- Why did output fall?
- In classical model, there were only 3 possible reasons.
  1. Shift in Supply of labor?
  2. Shift in Demand for labor?
  3. Disequilibrium situation.

First Explanation

Shift in Labor Supply



Reduces Output



Shifts in Labor Market

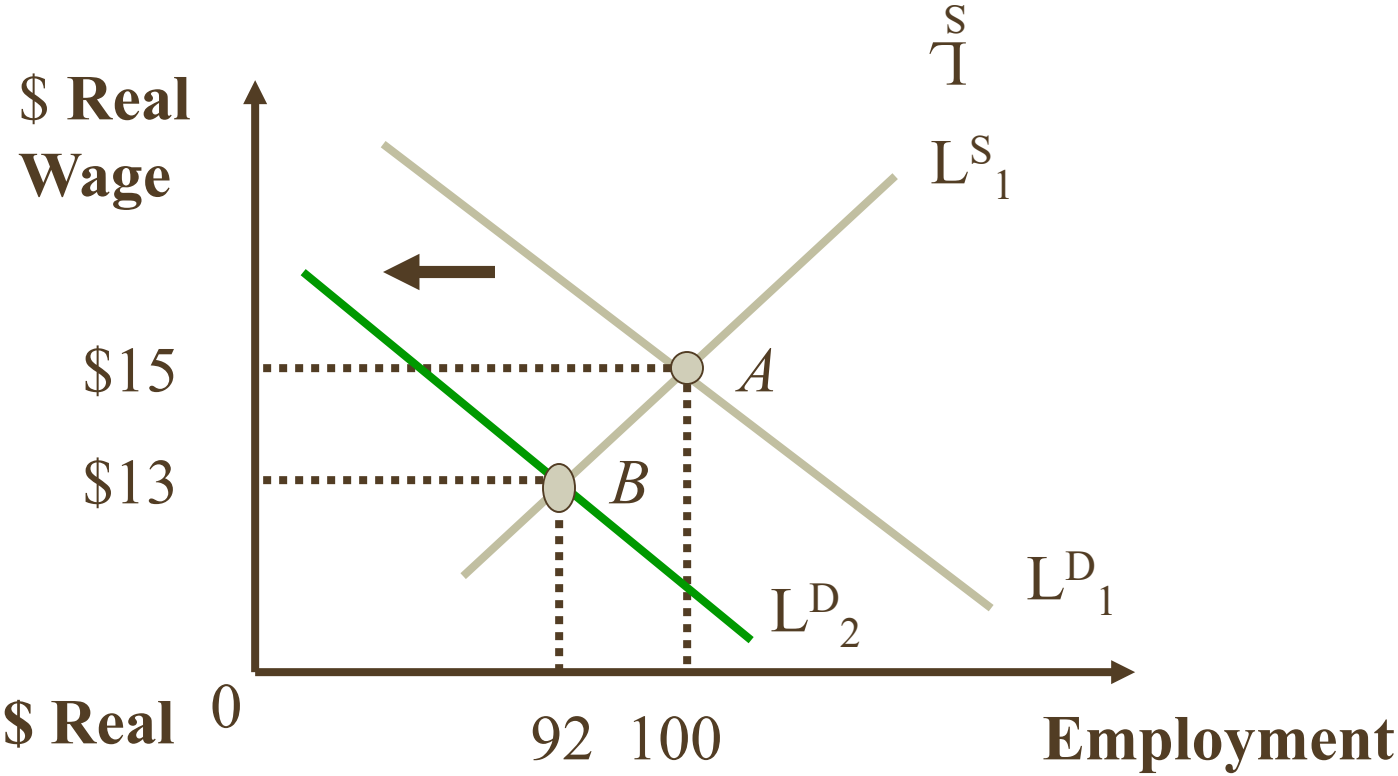
- **First Explanation:**
  - Fluctuations of real GDP be explained by a shift in the supply of labor.
  - Makes sense according to Classical theory.
  - But, no indication of an actual reduction in the supply of labor.
  - *First explanation not widely accepted.*

Shifts in Labor Market

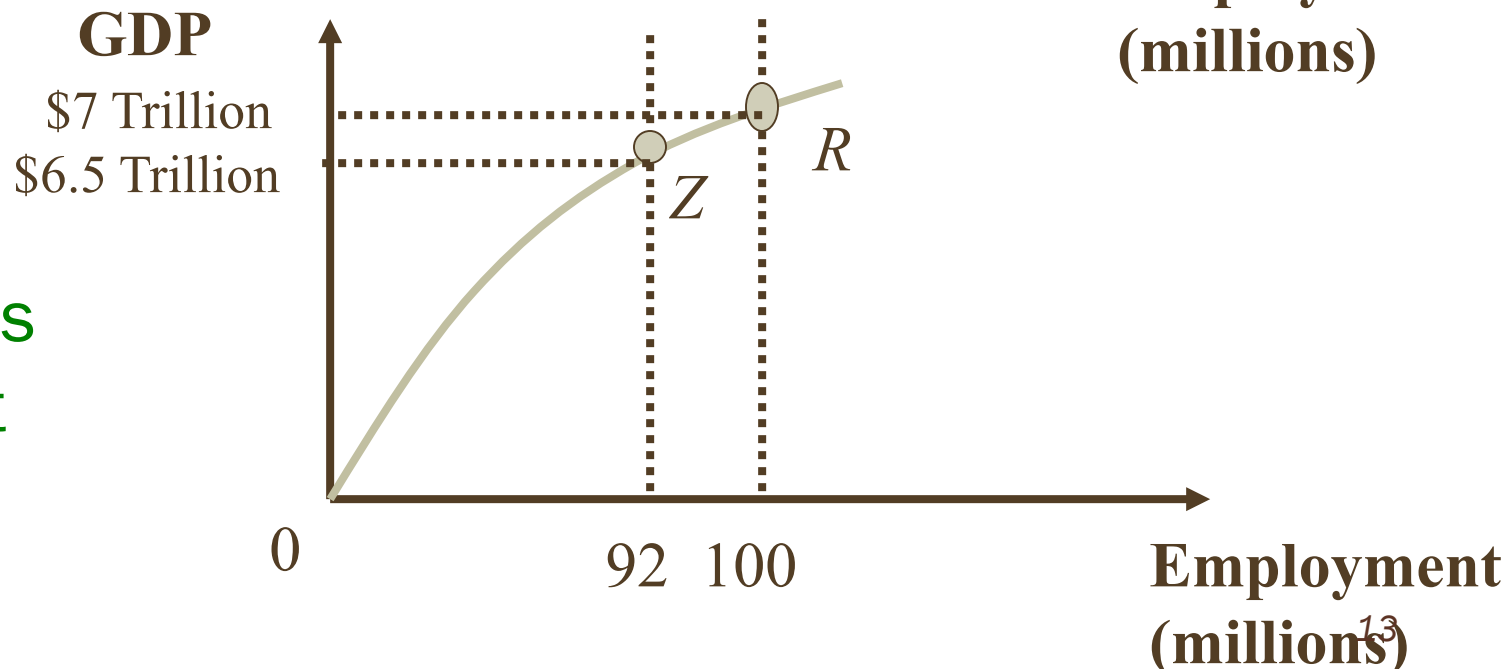
- **Second Explanation:**
  - A recession can also occur if there is a shift in labor demand.

Second Explanation

Shift in Labor Demand



Reduces Output



Shifts in Labor Market

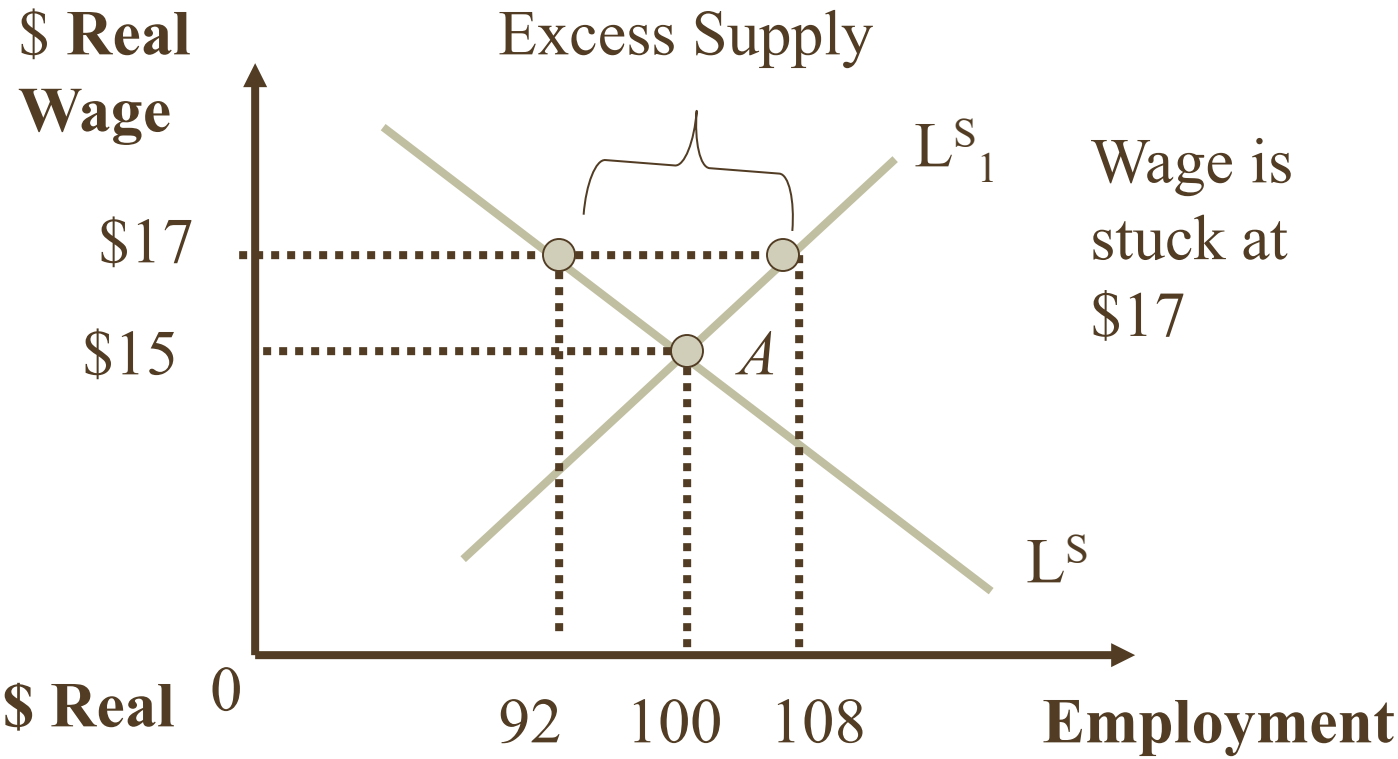
- **Second Explanation:**
  - A recession can also occur if there is a shift in labor demand.
  - Can occur if business investment declines,
    - Change in expectations
  - ***More widely accepted view.***

The Classical Model

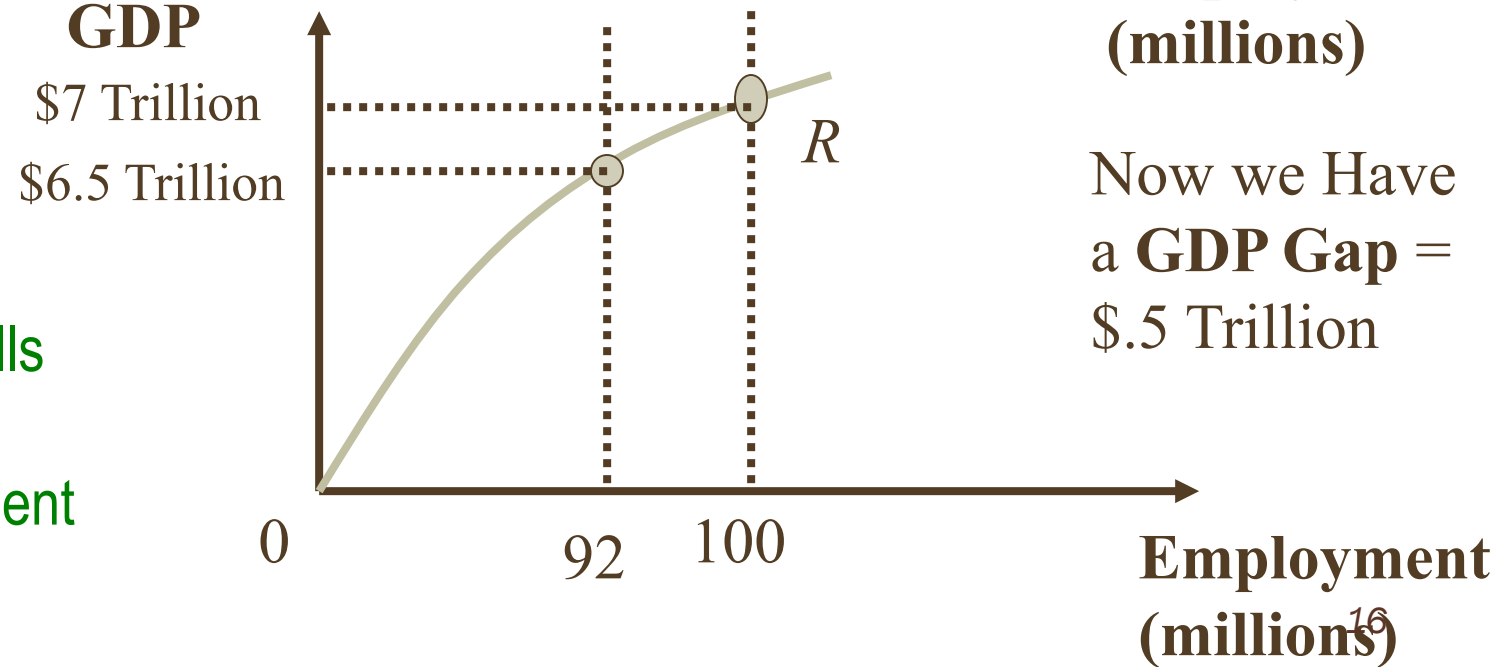
- **Third Explanation**
  - The Depression was caused by a *disequilibrium* phenomenon.
  - The wage was held <u>above</u> equilibrium by "frictions" in the labor market.
  - If these obstacles could be removed, then markets would clear.

Third Explanation

Disequilibrium situation, i.e. Market does not clear



Wage is stuck at $17



Now we Have a **GDP Gap** = $.5 Trillion

Output Falls with unemployment

Why would the labor market fail to clear?

- Labor markets governed by:
  - customary wages,
  - Contracts.
  - Government regulations
  - may set minimum wages, rules limiting hiring and firing, mandating benefits. (*Not in the Great Depression, however*).