

Macroeconomics: Principles & Applications

CHAPTER 10



Economic Fluctuations

Robert E. Hall
Mark Lieberman

PowerPoint slides prepared by:
Andreea Chiritescu
Eastern Illinois University

Economic Fluctuations

- **Economic fluctuations**
 - **Recessions**
 - Output declines, occasionally sharply
 - Employment falls
 - **Expansions**
 - Output rises quickly - faster than potential output
 - Employment rises
- **Boom**
 - Output often exceeds potential output

Economic Fluctuations

- **Economic fluctuations**
 - Employment and output move very close together
 - Expansions and recessions don't last forever
 - Three things to explain:
 - Why they occur in the first place
 - Why they sometimes last so long
 - Why they do not last forever

Figure 1a: Potential, actual real GDP, employment 1979–2009 (first half)

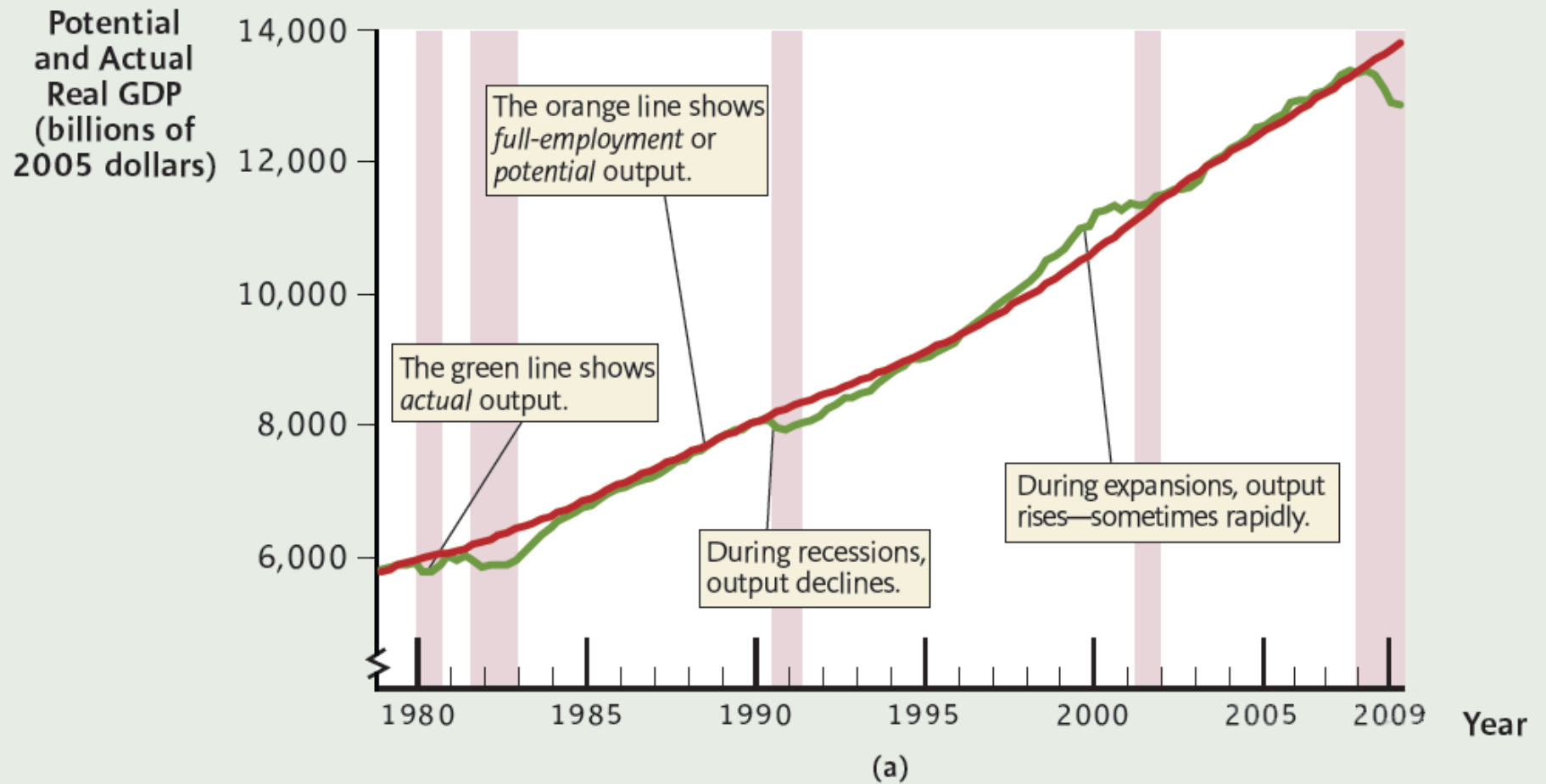


Figure 1b: Potential, actual real GDP, employment 1979–2009 (first half)

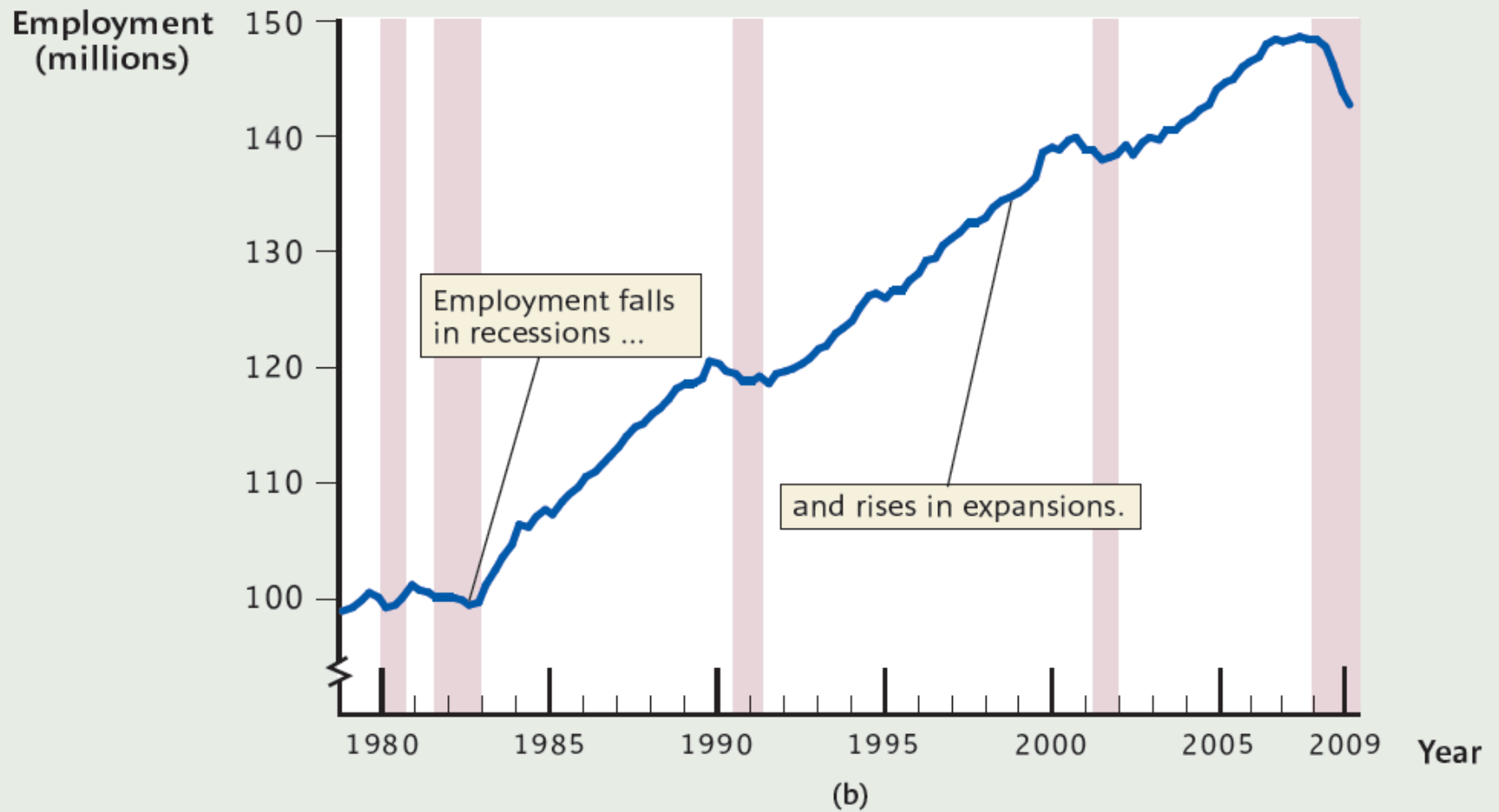
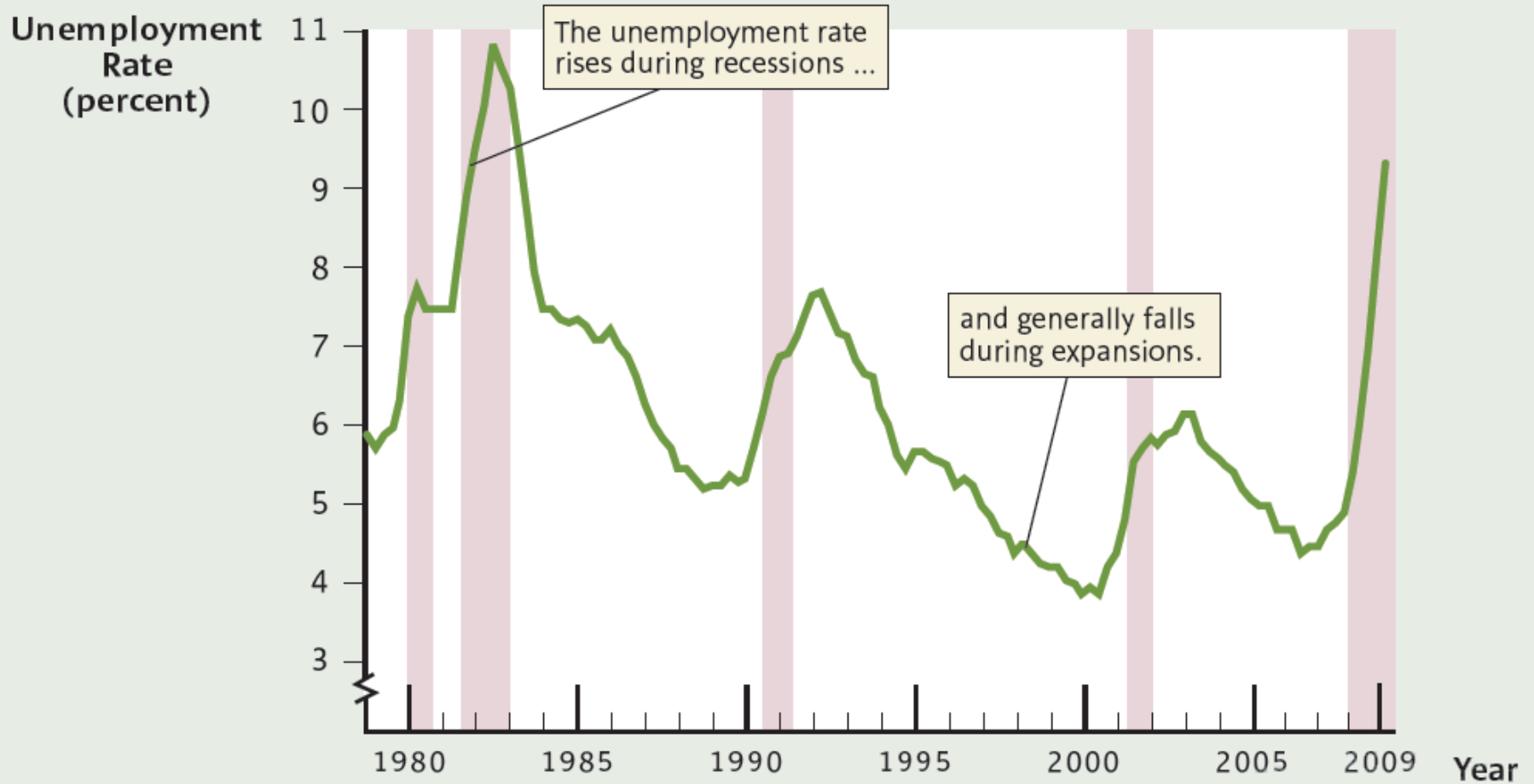


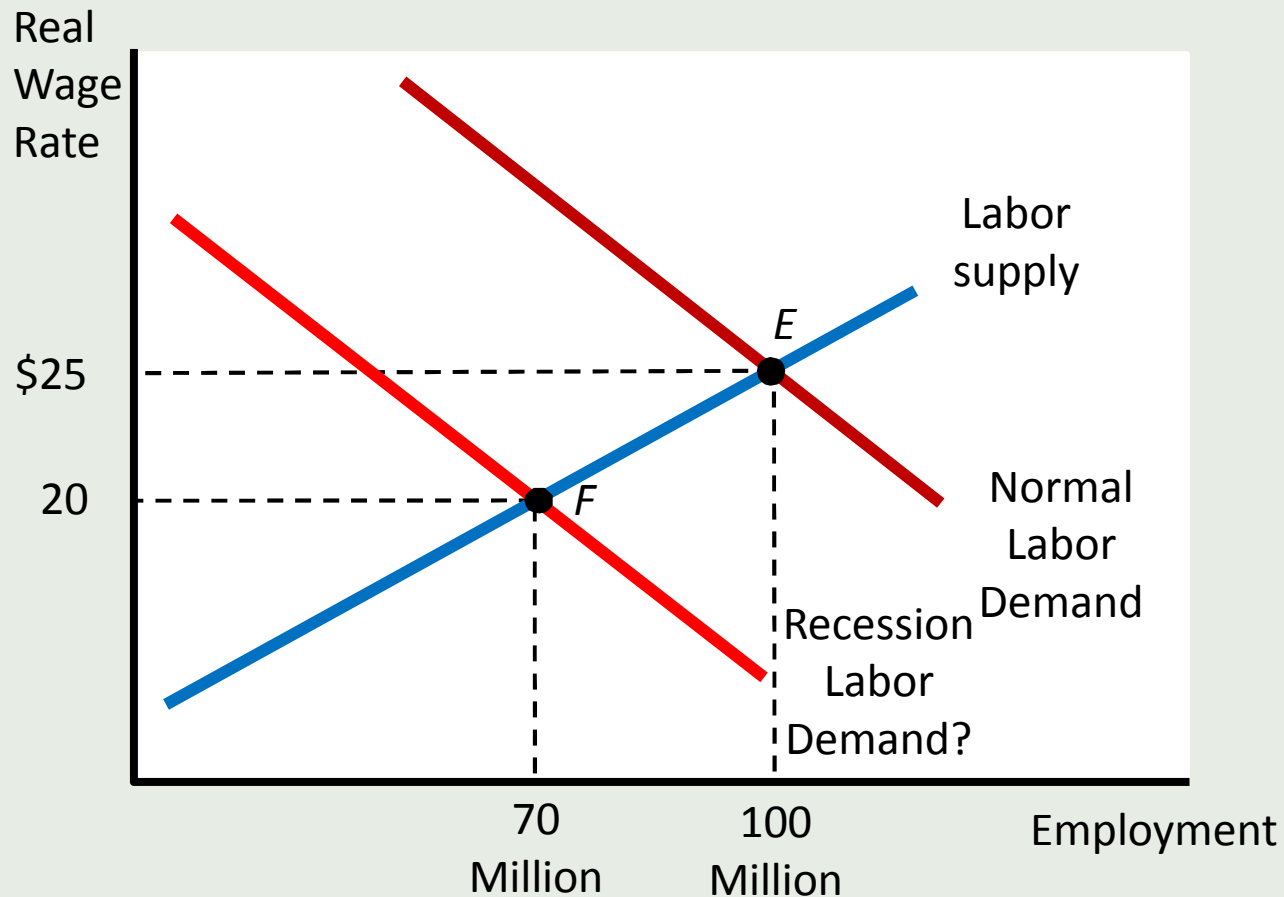
Figure 2: U.S. Unemployment rate, quarterly, 1979–2009 (first half)



Can Classical Model Explain Economic Fluctuations?

- **Recession**
 - Might be caused by a leftward shift of the labor demand curve
 - Sudden change in spending
 - Workers – less productive
- **Shifts in the labor demand curve**
 - Are not very large from year to year
 - The classical model cannot explain real-world economic fluctuations through shifts in labor demand

Figure 3: A Recession Caused by Declining Labor Demand?

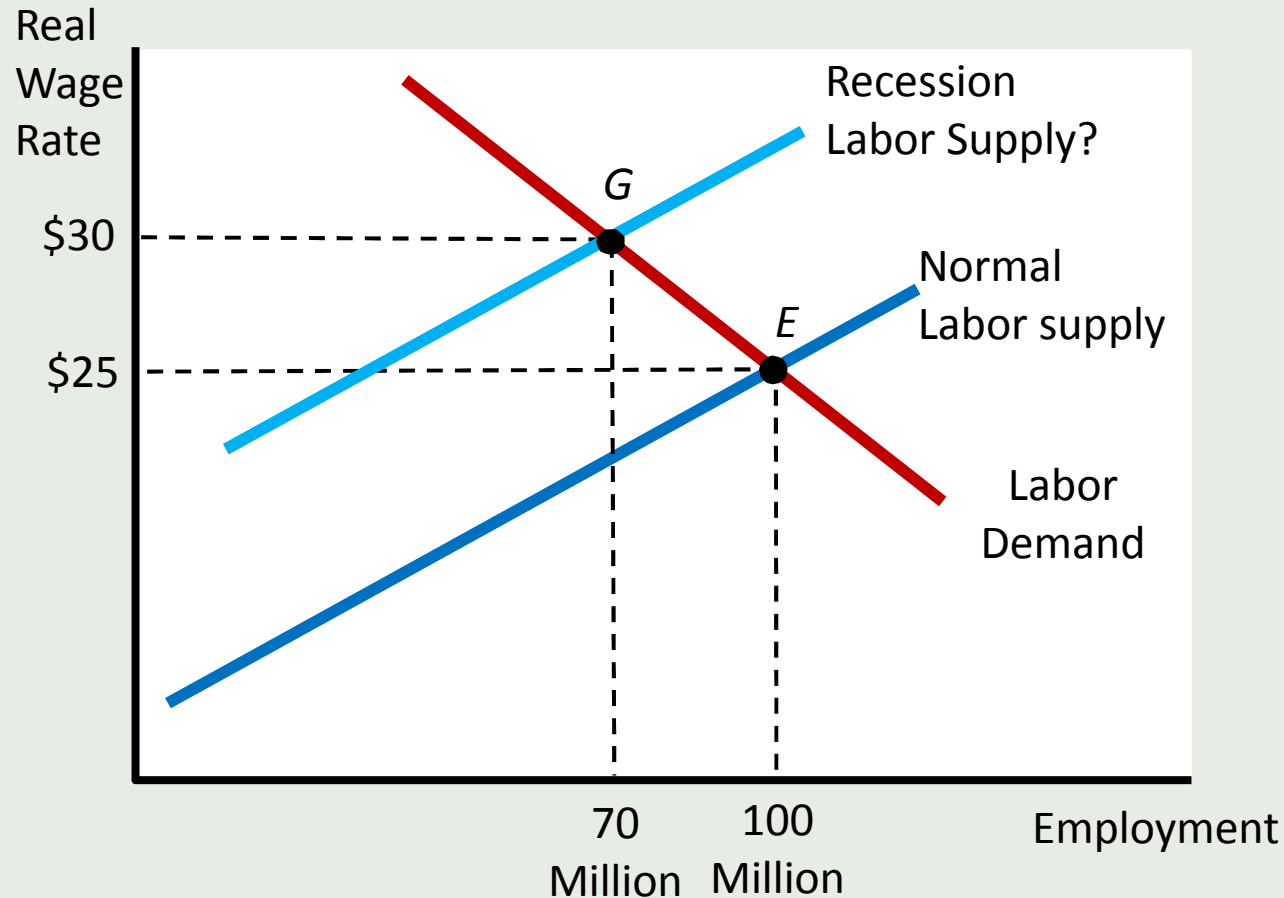


In theory, a recession could be caused by a sudden leftward shift in the labor demand curve, causing employment to fall. In fact, large, sudden shifts in labor demand are an unlikely explanation for real-world fluctuations.

Can Classical Model Explain Economic Fluctuations?

- **Recession**
 - Might be caused by a leftward shift of the labor supply curve
- **Sudden shifts in the labor supply curve**
 - Are unlikely to occur
 - Could not accurately describe the facts of the economic cycle
 - The classical model cannot explain fluctuations through shifts in the supply of labor

Figure 4: A Recession Caused by Declining Labor Supply?



In theory, a recession could be caused by a sudden leftward shift in the labor supply curve, causing employment to fall. In fact, shifts in labor supply occur very slowly, so they cannot explain economic fluctuations.

Can Classical Model Explain Economic Fluctuations?

- **Classical model**
 - Assumes that the market always clears
 - Does a poor job of explaining the economy in the short run
 - We cannot explain the facts of short-run economic fluctuations with a model in which the labor market always clears

What Triggers Economic Fluctuations?

- **Macroeconomic fluctuations**
 - Change in production
 - Lower production – recession
 - Higher production – expansion
 - Change in spending
 - More saving – recession
 - More spending – can trigger a boom

What Triggers Economic Fluctuations?

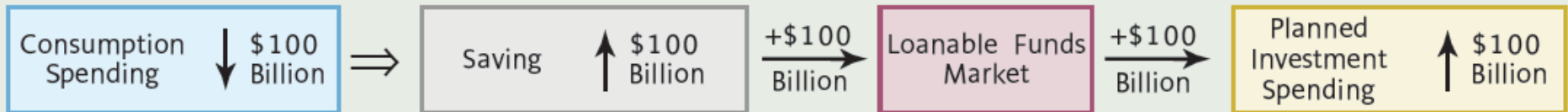
- Say's law doesn't prevent recessions
 - In the long run:
 - Interest rate adjusts until saving = business and government borrowing
 - Lower consumer spending – will not threaten the economy
 - In the short run:
 - Interest rate may not adjust

What Triggers Economic Fluctuations?

- Total spending will drop below total income
 - Violating Say's law
 - Ceteris paribus
 - When households spend less (save more)
 - But do not supply all of their additional saving to the loanable funds market

Figure 5a: Two Destinations for Additional Household Saving

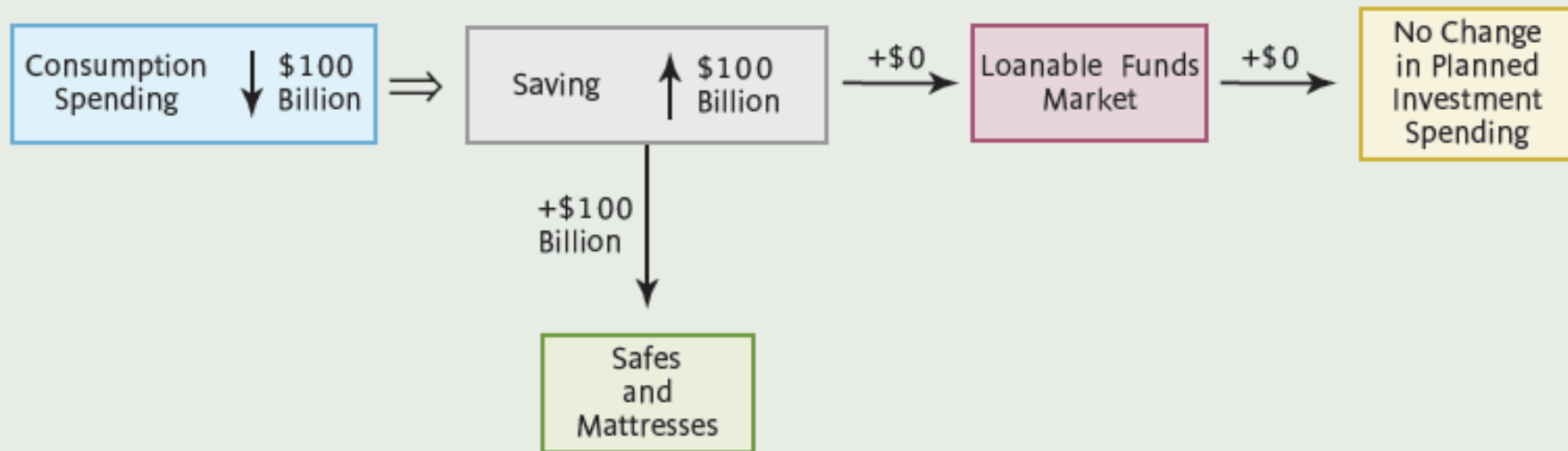
(a) Consumption Falls, Planned Investment Rises => Total Spending Unchanged



In panel (a), the loanable funds market behaves according to the classical model. Households cut their spending (increase their saving) by \$100 billion per year, and supply it all to the loanable funds market. The funds are loaned out to business firms, and planned investment rises by \$100 billion. Consumption falls by \$100 billion and planned investment rises by \$100 billion, so there is no change in total spending

Figure 5b: Two Destinations for Additional Household Saving

(b) Consumption Falls, Planned Investment Unchanged \Rightarrow Total Spending Falls



Panel (b) deviates from the classical model. As in panel (a), households cut their spending (increase their saving) by \$100 billion per year, but now they supply none of it to the loanable funds market. The additional saving is not loaned out to business firms, and planned investment does not change. Consumption falls by \$100 billion and planned investment does not change, so total spending drops by \$100 billion.

What Triggers Economic Fluctuations?

- Total spending will drop below total income
 - When households save more (spend less)
 - But financial intermediaries do not lend out all of the additional saving
 - If households save more (spend less)
 - But other factors prevent the interest rate from falling to its market-clearing level
 - Then some of the additional saving will not be borrowed and spent by others

Figure 6: Additional saving supplied to the market but not loaned out



Households cut their spending (increase their saving) by \$100 billion per year, and supply all of the additional funds to the loanable funds market. But if pessimistic financial intermediaries in the loanable funds market do not lend out the funds, there is no additional borrowing by business firms. Because consumption falls by \$100 billion and planned investment does not change, total spending falls by \$100 billion.

Table 1: Expansions and Recessions in the Last 50 Years

Period		Event	Initial Spending Changes
Late 1960s	Expansion	Vietnam War	Defense spending ↑
1970	Recession	Change in Federal Reserve policy	Spending on new homes ↓
1974	Recession	Dramatic increase in oil prices	Spending on cars and other energy-using products ↓
1980	Recession	Dramatic increase in oil prices	Spending on cars and other energy-using products ↓
1981–82	Recession	Change in Federal Reserve policy	Spending on new homes, cars, and business investment ↓
Early 1980s	Expansion	Military buildup	Defense spending ↑
Late 1980s	Expansion	Dramatic decline in oil prices	Spending on energy-using products ↑
1990	Recession	Large increase in oil prices; collapse of Soviet Union	Spending on cars and other energy-using products ↓; Defense spending ↑

Table 1: Expansions and Recessions in the Last 50 Years

Period		Event	Initial Spending Changes
1991–2000	Expansion	Technological advances in computers; development of the Internet; high wealth creation	Spending on capital equipment ↑; Consumption spending ↓
2001	Recession	Investment in new technology slows; technology-fueled bubble of optimism bursts; wealth destruction	Spending on capital equipment ↓
2002–2007	Expansion	Changes in fiscal and Federal Reserve policies; rapid rise in housing wealth	Consumption spending ↑
2008–?	Recession	Oil prices rise; housing bubble bursts; financial crisis	Spending on cars and new homes ↓