INTERMEDIATE MACROECONOMICS

IS-LM MODEL OF BUSINESS CYCLES

13. MONETARY & FISCAL POLICY

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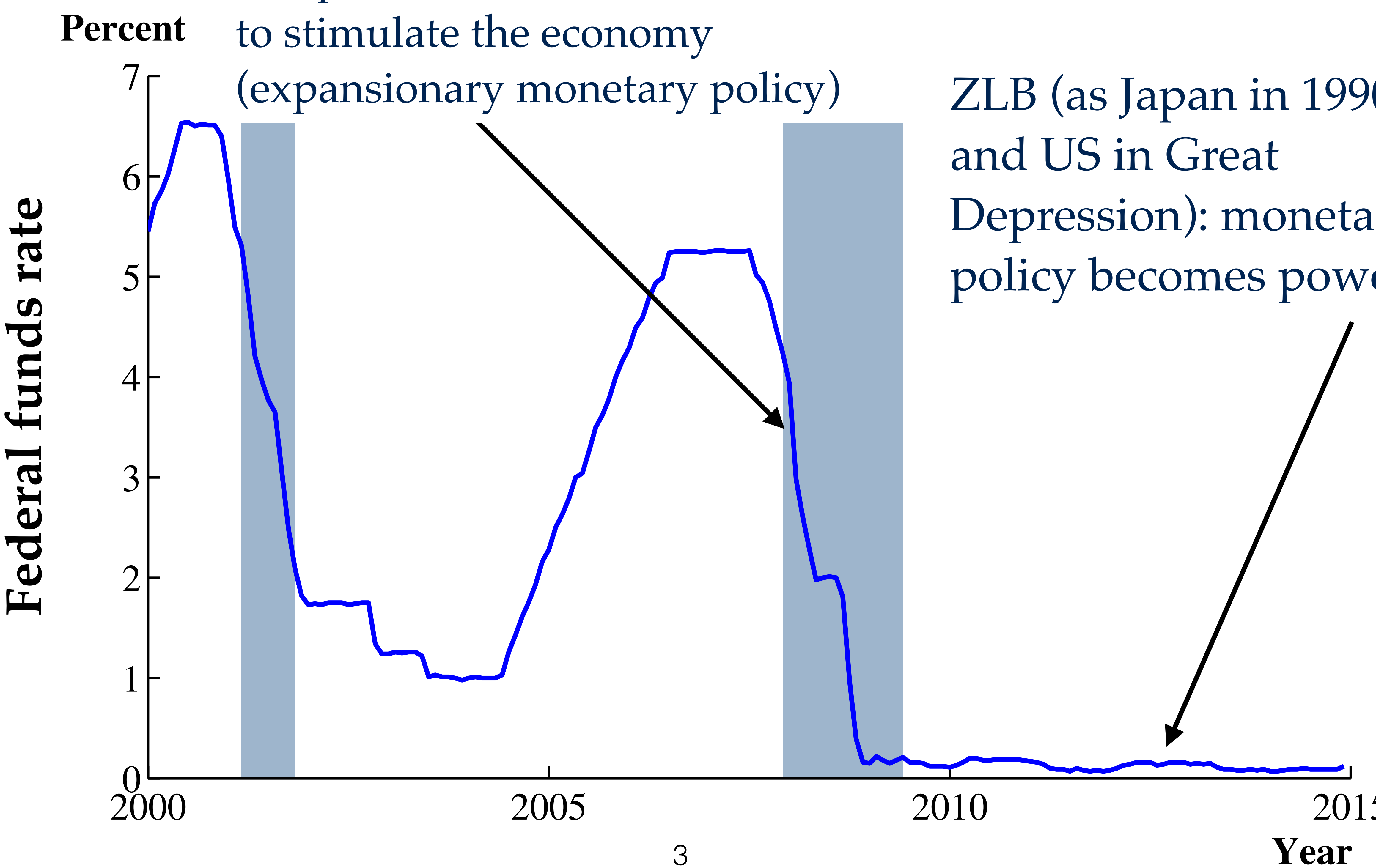
MANDATE OF THE US GOVERNMENT

- Employment Act of 1946 + Full Employment Act of 1978
- key objective: policy must foster "price stability" and bring the economy to "full employment"
  - inflation about 2% and unemployment about 3% – 4%
- Federal Reserve System: through monetary policy (federal funds rate)
  - most recent Fed announcement: https://www.federalreserve.gov/newsevents/pressreleases/monetary20180926a.htm
- federal government: through fiscal policy
  - public spending, public employment, taxes, transfers

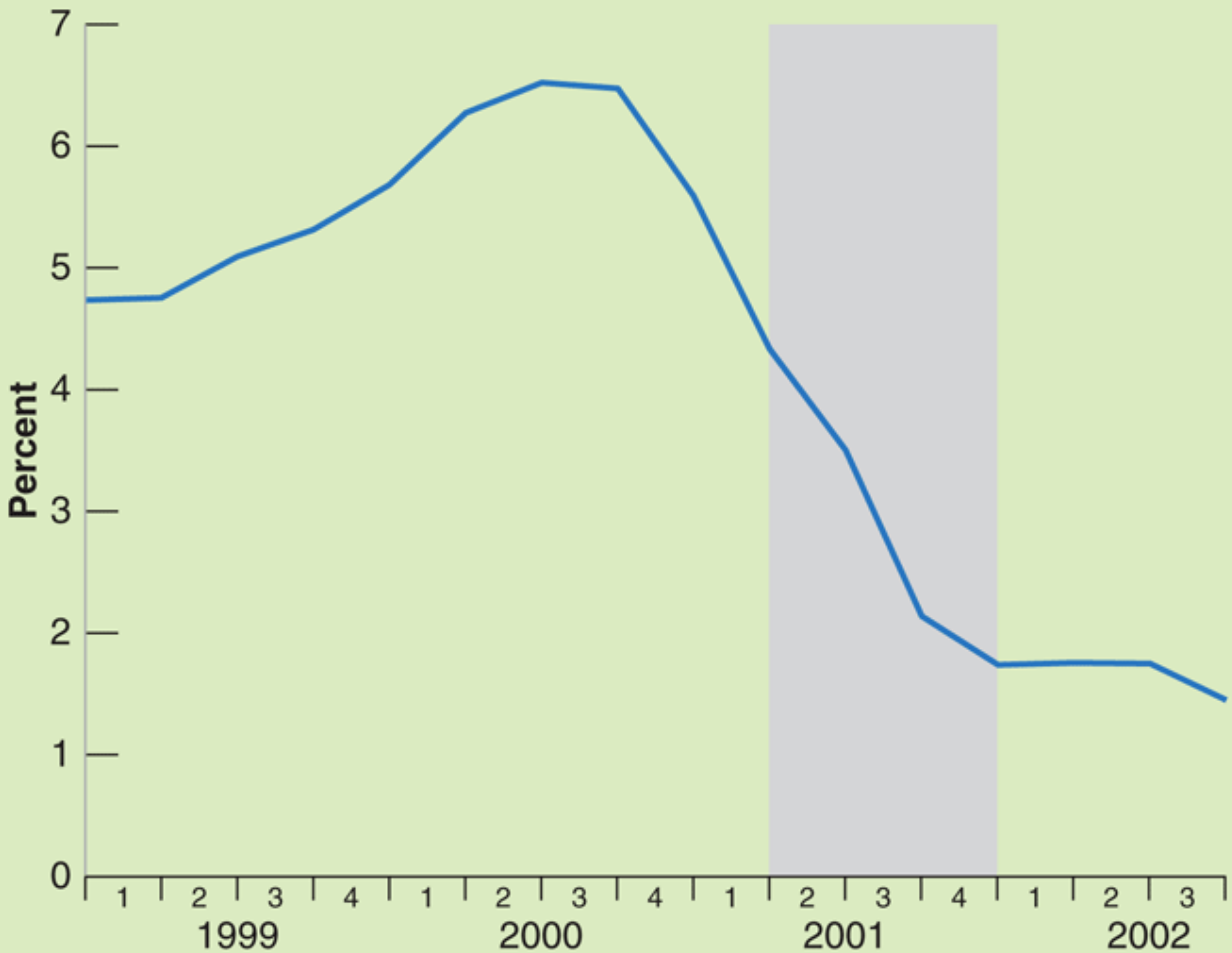
US MONETARY POLICY DURING GREAT RECESSION, 2007–2009

sharp reduction of federal funds rate to stimulate the economy (expansionary monetary policy)

ZLB (as Japan in 1990s and US in Great Depression): monetary policy becomes powerless



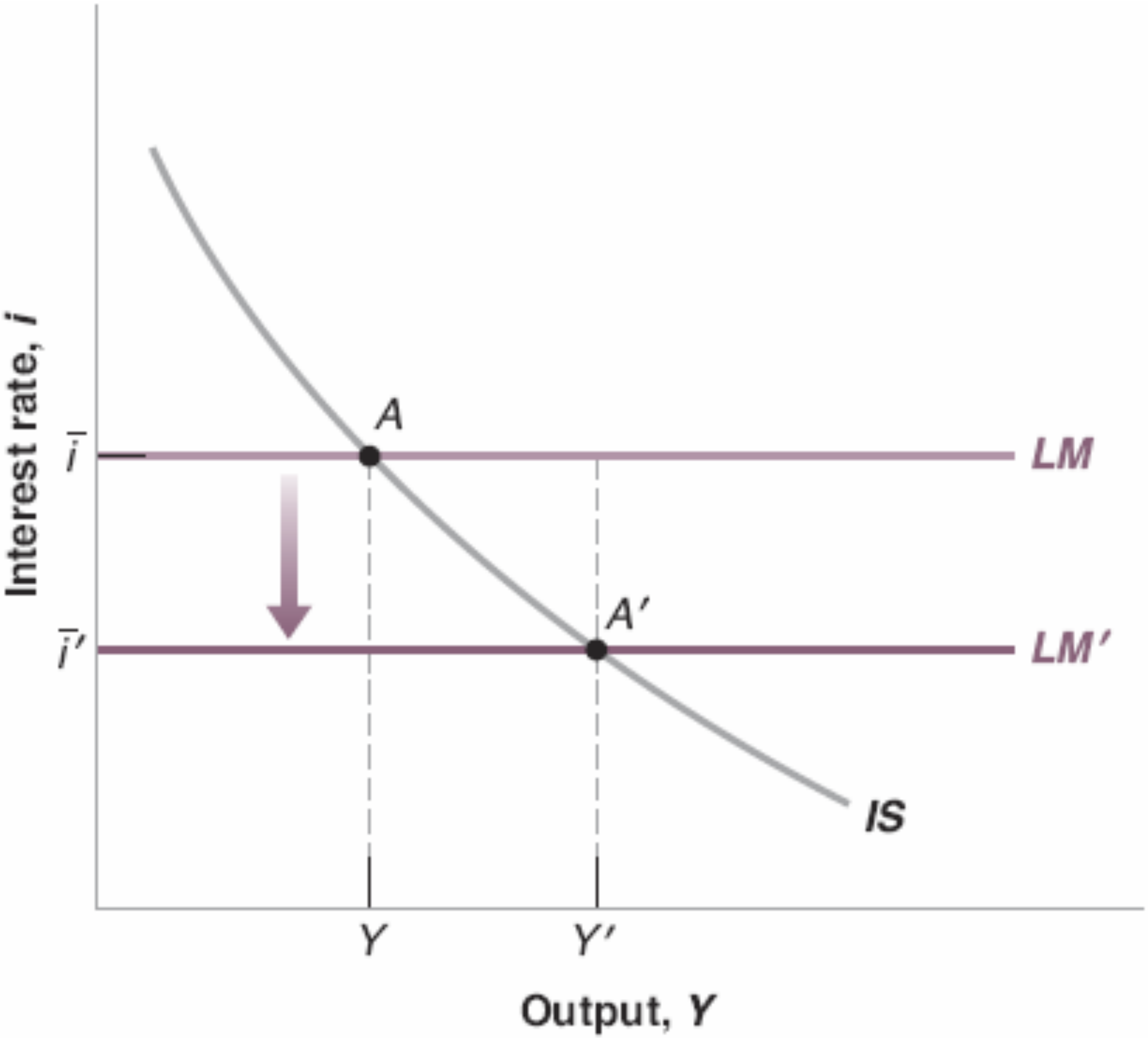
ANOTHER EXAMPLE: 2001 RECESSION



Source: Series FEDFUNDS, Federal Reserve Economic Data (FRED) http://research.stlouisfed.org/fred2/

- strong response of monetary policy to the recession
- the Fed cut the federal funds rate from 6.5% to 2%
- the goal of this expansionary monetary policy was to stimulate the economy

EXPANSIONARY MONETARY POLICY IN IS-LM MODEL

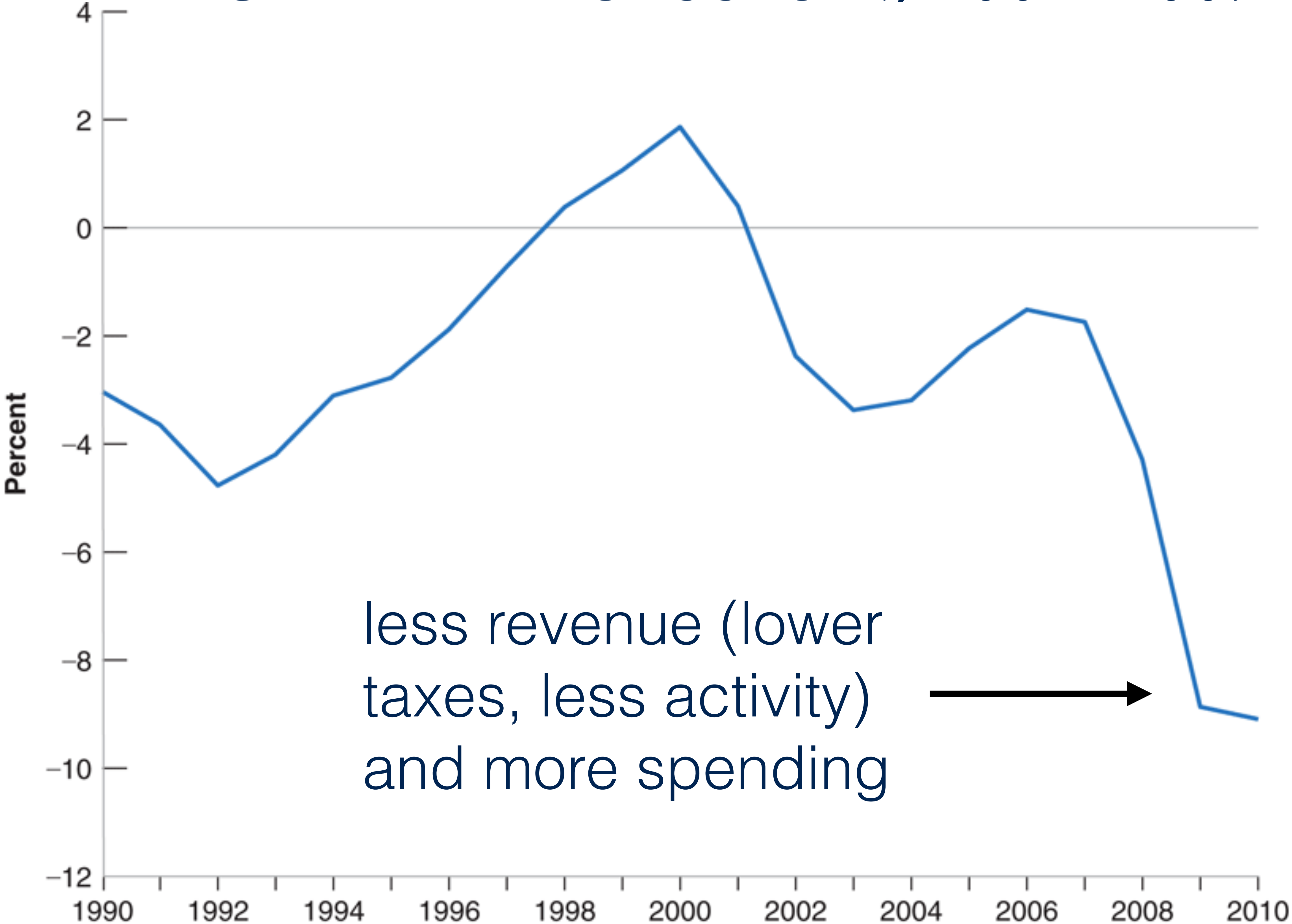


- the reduction in interest rate is implemented by increasing the money supply through OMO
- the LM curve shifts down
- equilibrium output rises (so consumption and investment also rise)
- this monetary policy is expansionary

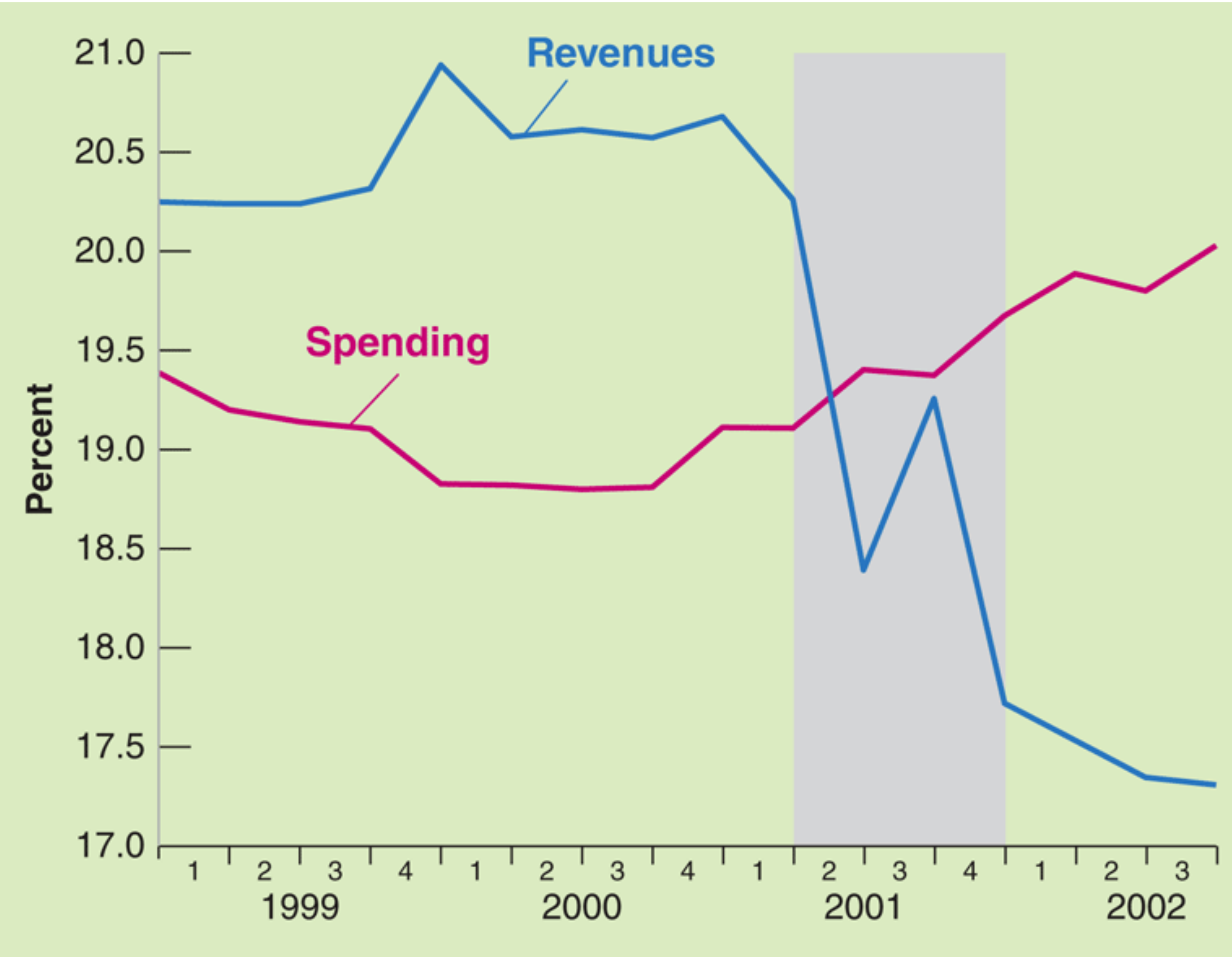
US FISCAL POLICY DURING GREAT RECESSION, 2007–2009

- American Recovery and Reinvestment Act of 2009
  - spending: $780 billion
  - increase in the duration of unemployment benefits from 26 weeks to 99 weeks
  - increase in the generosity of other welfare programs, such as the Supplemental Nutrition Assistance Program (food stamps)
  - spending on infrastructure projects

BUDGET DEFICIT (% GDP) DURING GREAT RECESSION, 2007–2009



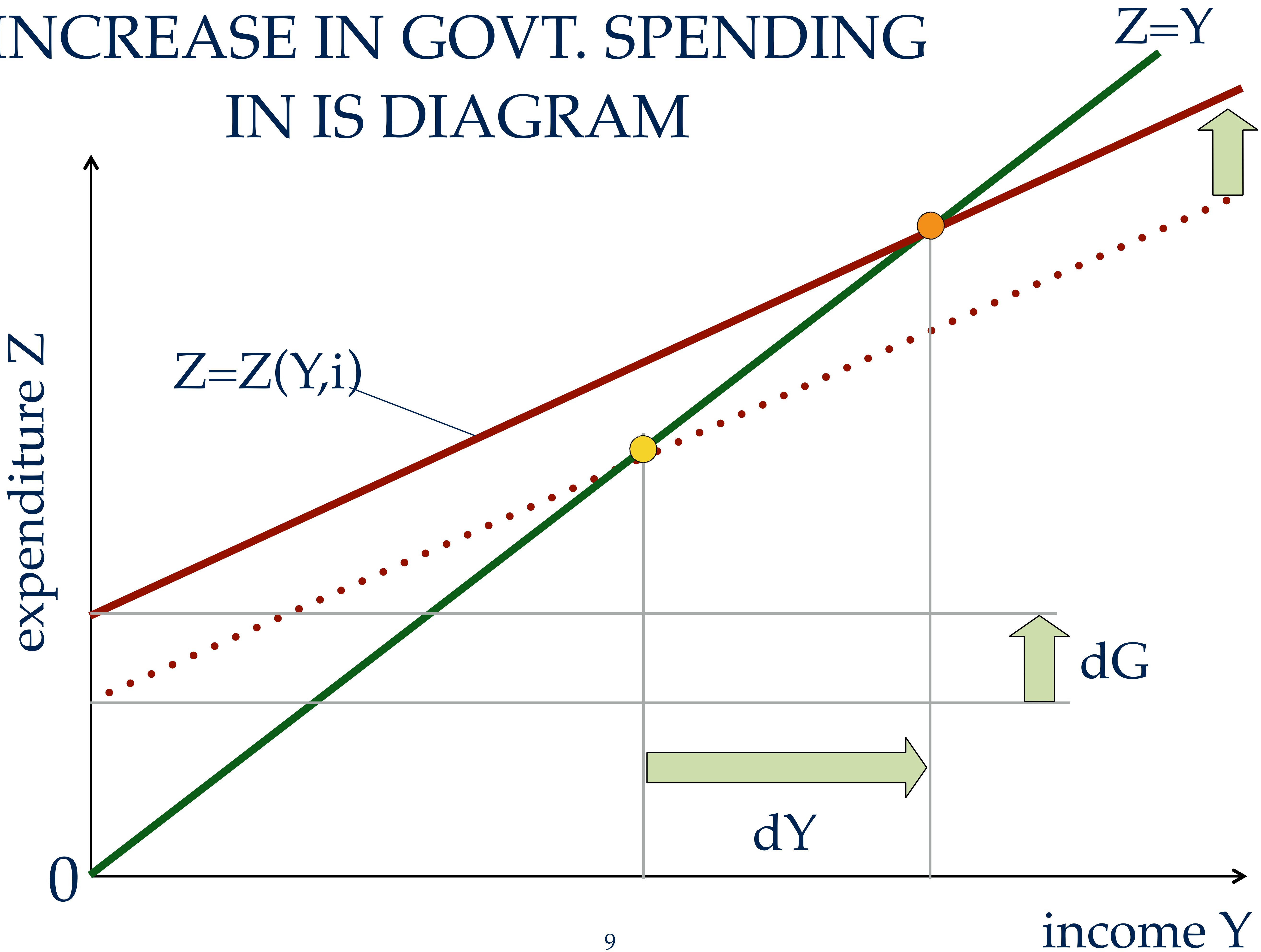
ANOTHER EXAMPLE: 2001 RECESSION



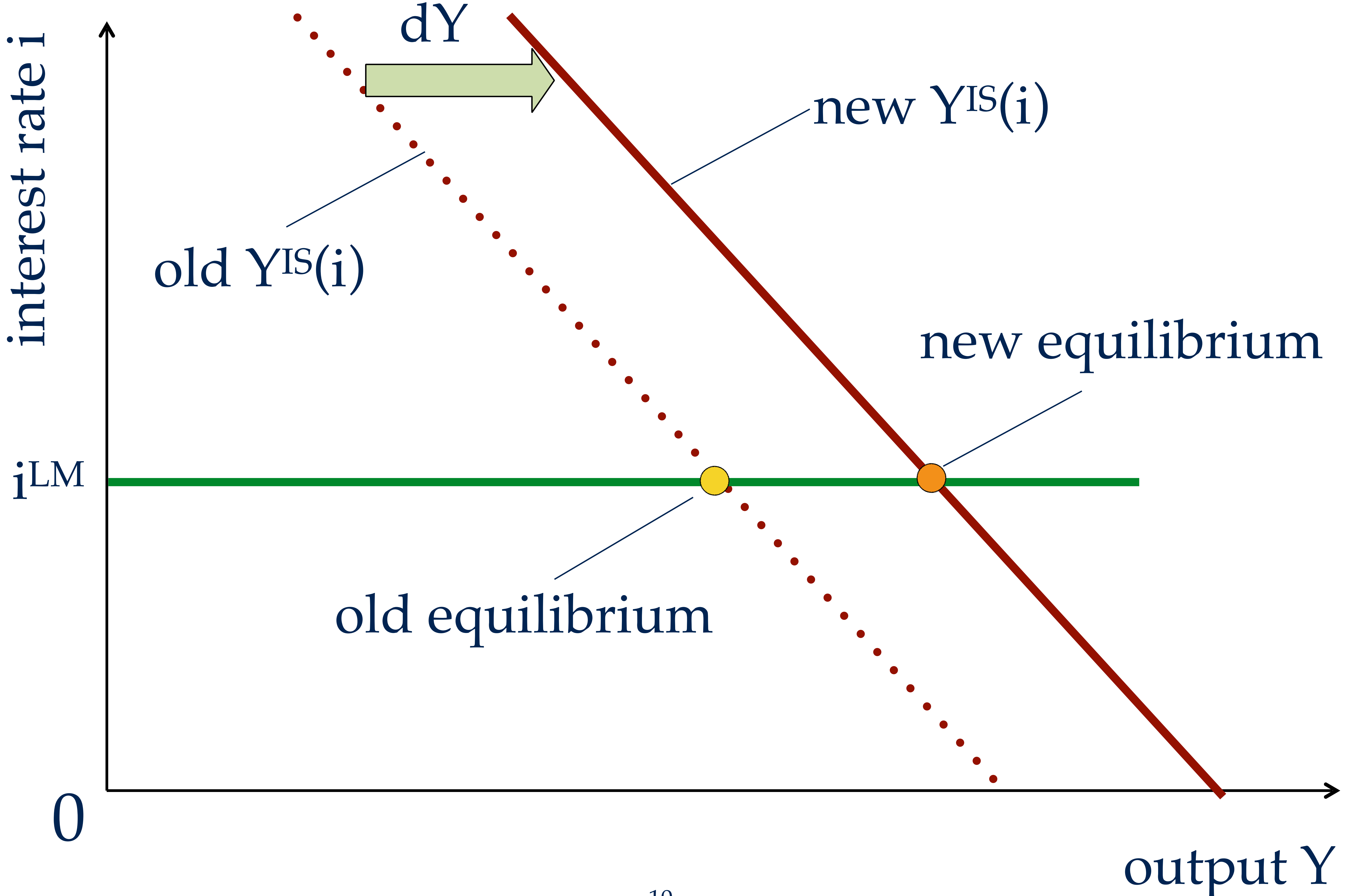
Source: Calculated using Series GDP, FGRECPY, FGEXPND, Federal Reserve Economic Data (FRED) http://research.stlouisfed.org/fred2/

- taxes were cut in 2001 and 2002
- government spending increased in 2001 and 2002 (partly in response to 09/11/2001)
- in 2002: the government ran a budget deficit

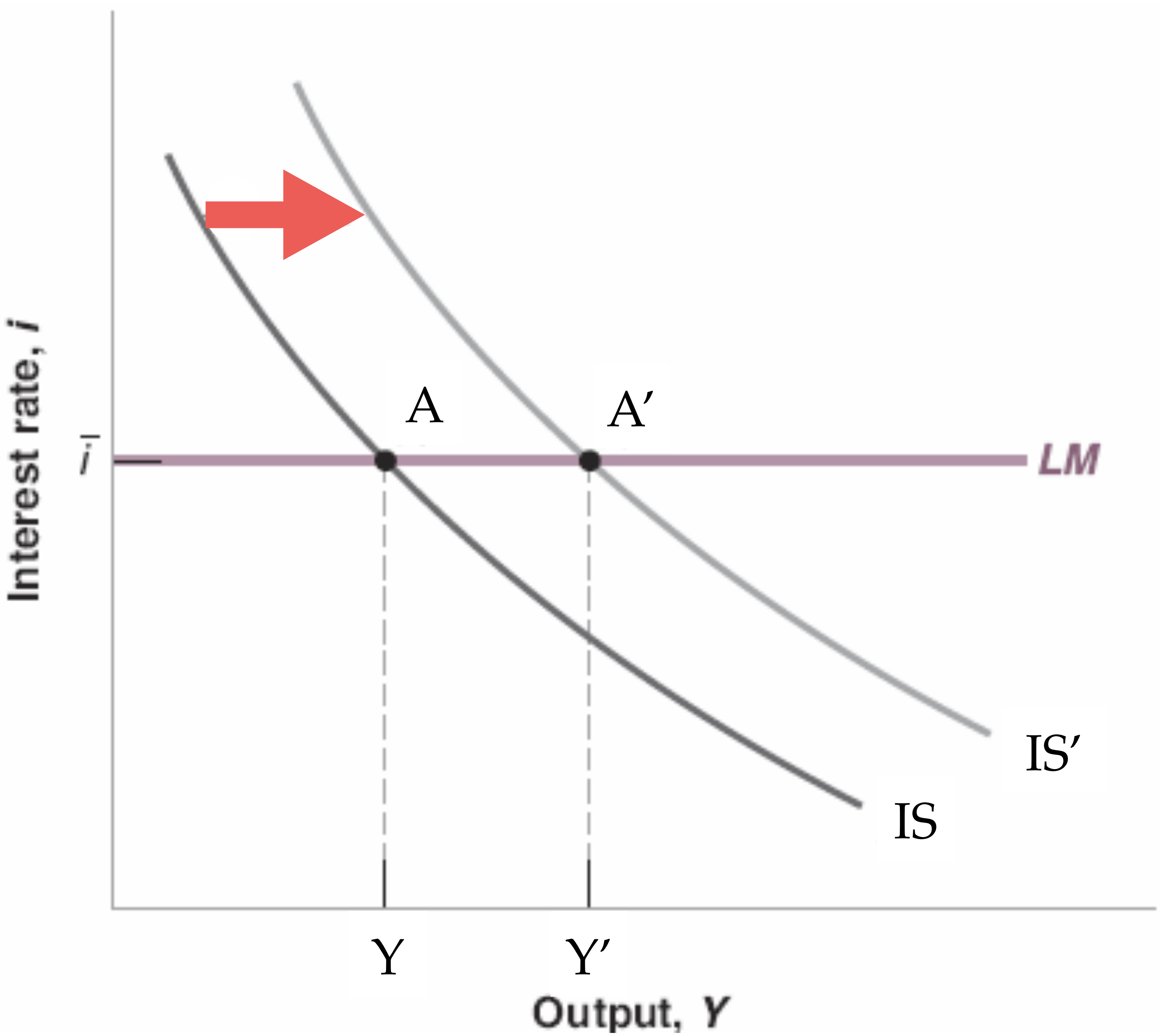
INCREASE IN GOVT. SPENDING IN IS DIAGRAM



INCREASE IN GOVT. SPENDING IN IS-LM DIAGRAM

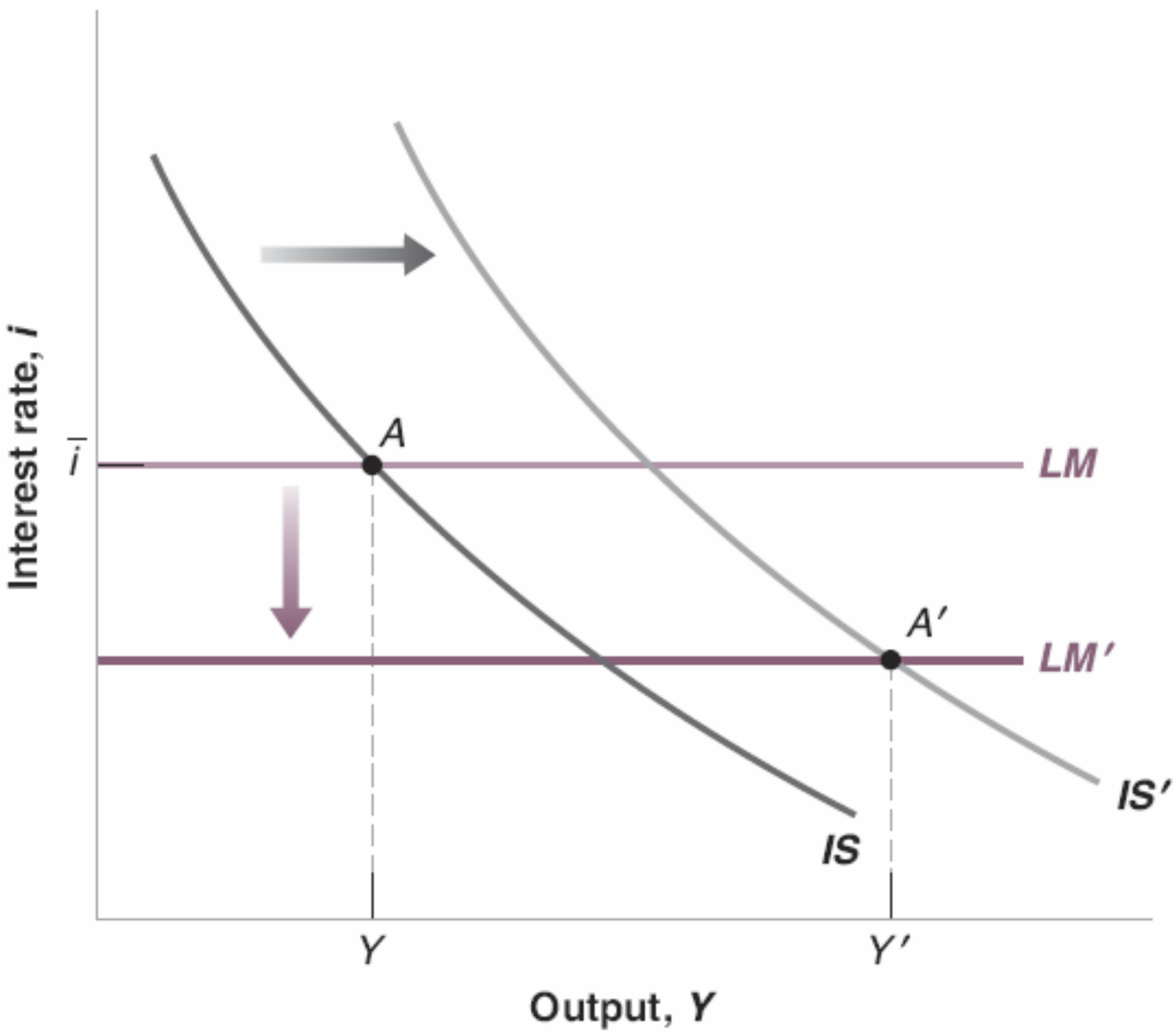


EXPANSIONARY FISCAL POLICY IN IS-LM DIAGRAM



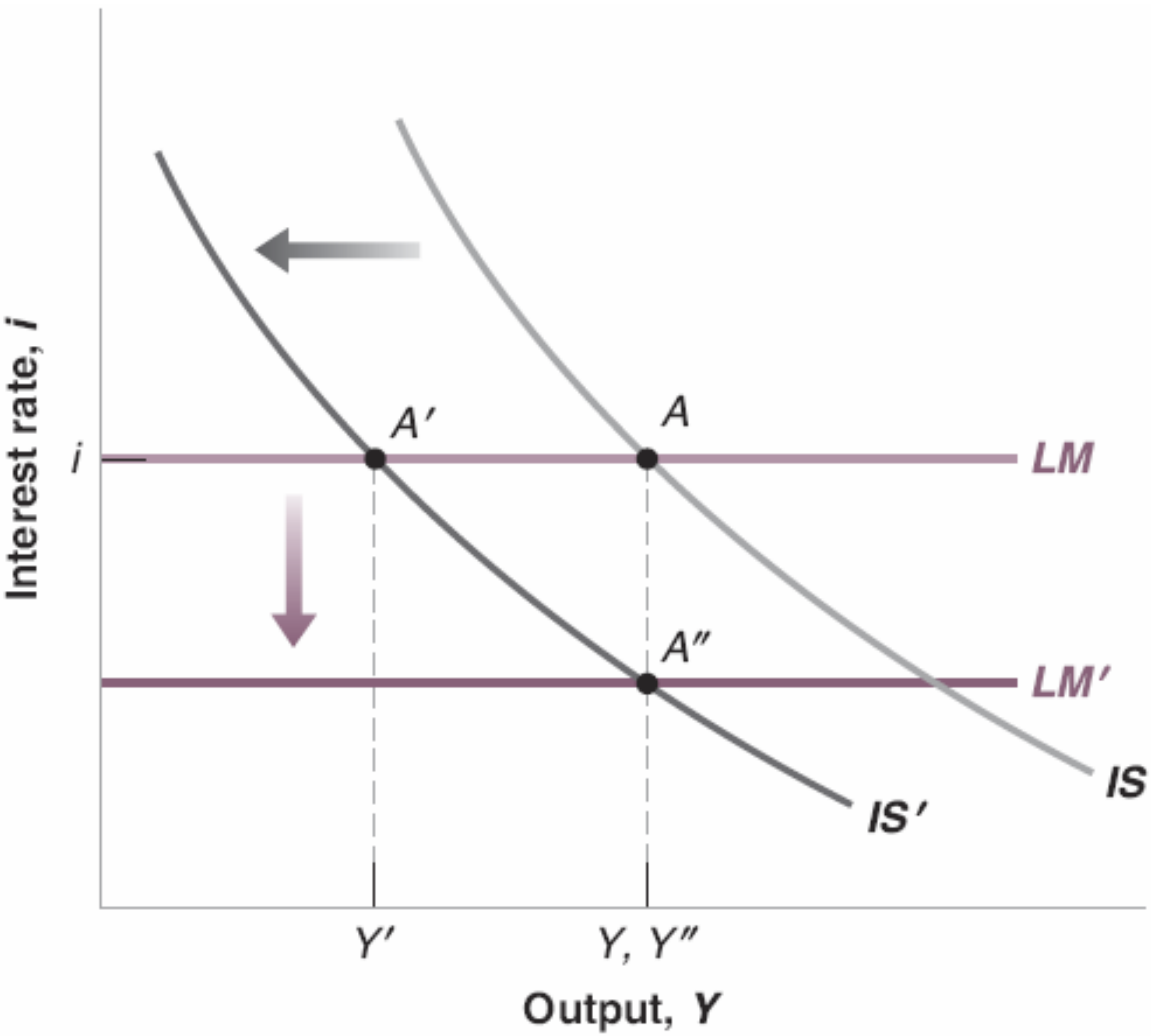
- lower T or higher G raise autonomous spending
- such increase in G – T leads to a higher budget deficit
- the IS curve shifts rightward
- equilibrium output increases (so consumption and investment also rise)
- this fiscal policy is expansionary

POLICY MIX: MONETARY & FISCAL EXPANSIONS



- monetary expansion: shifts the LM curve down
- fiscal expansion: shifts the IS curve to the right
- the combination of these expansionary policies leads to higher output, consumption, and investment

HOW TO REDUCE GOVERNMENT DEFICIT WITHOUT CAUSING A RECESSION?



- first step: raise T and/or lower G to reduce the government budget deficit (as G–T is lower)

- second step: combine the fiscal policy with a monetary expansion to maintain output at the same level

- the policy mix keeps output at the same level but reduces the government budget deficit!