

LECTURE 12

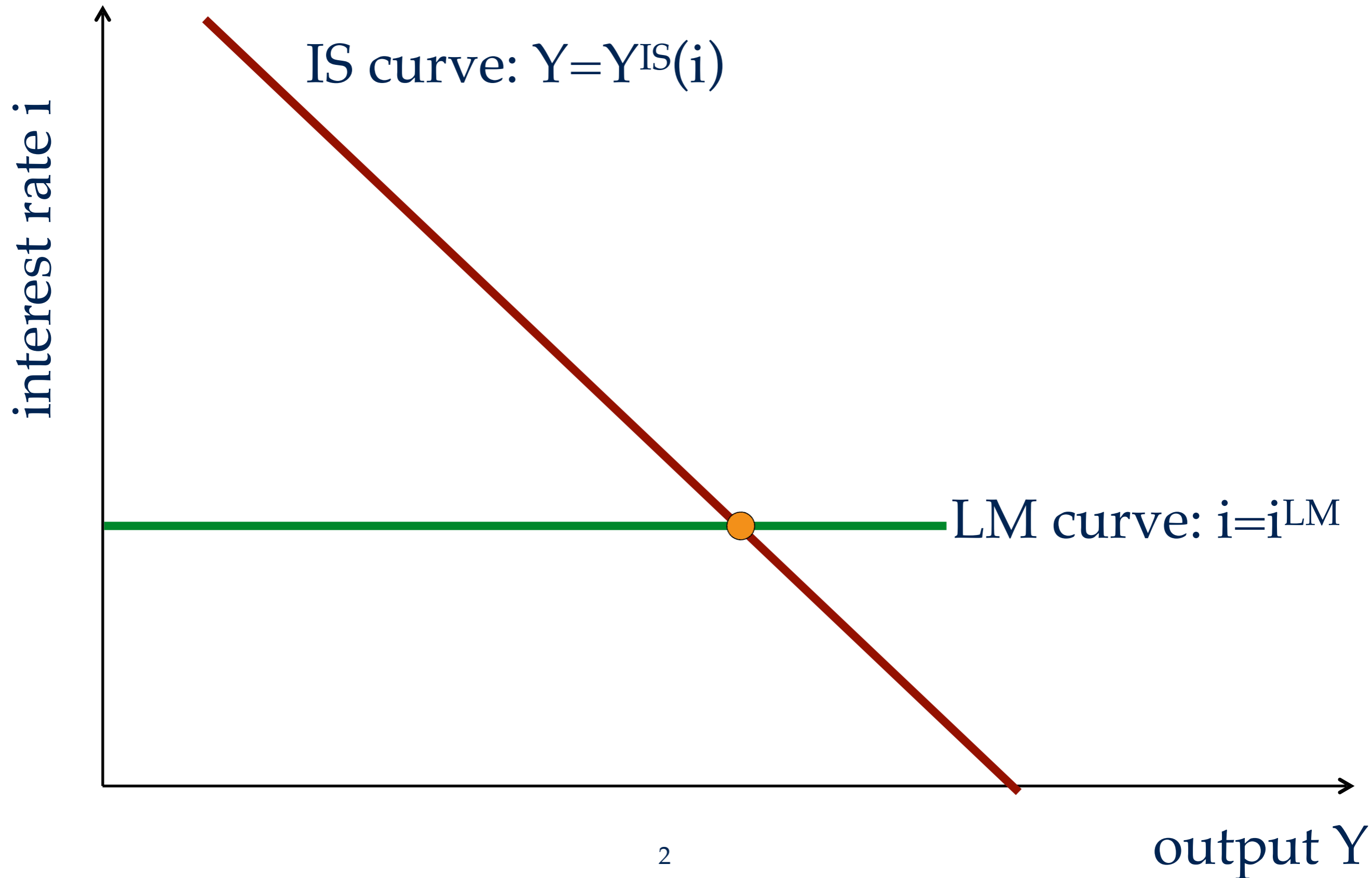
IS-LM | RECESSIONS

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IS-LM EQUILIBRIUM DIAGRAM

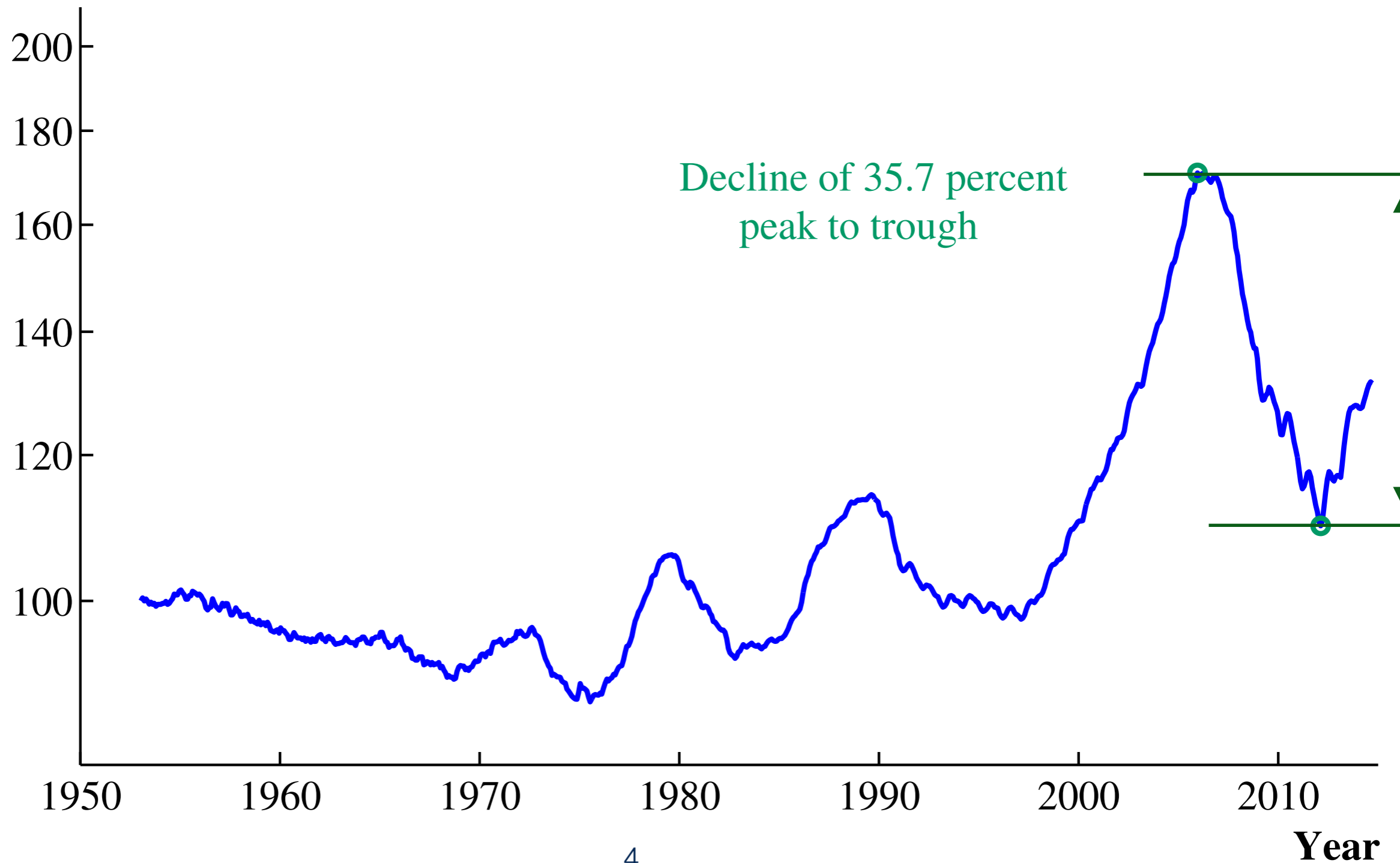


THE GREAT RECESSION, 2007–2009

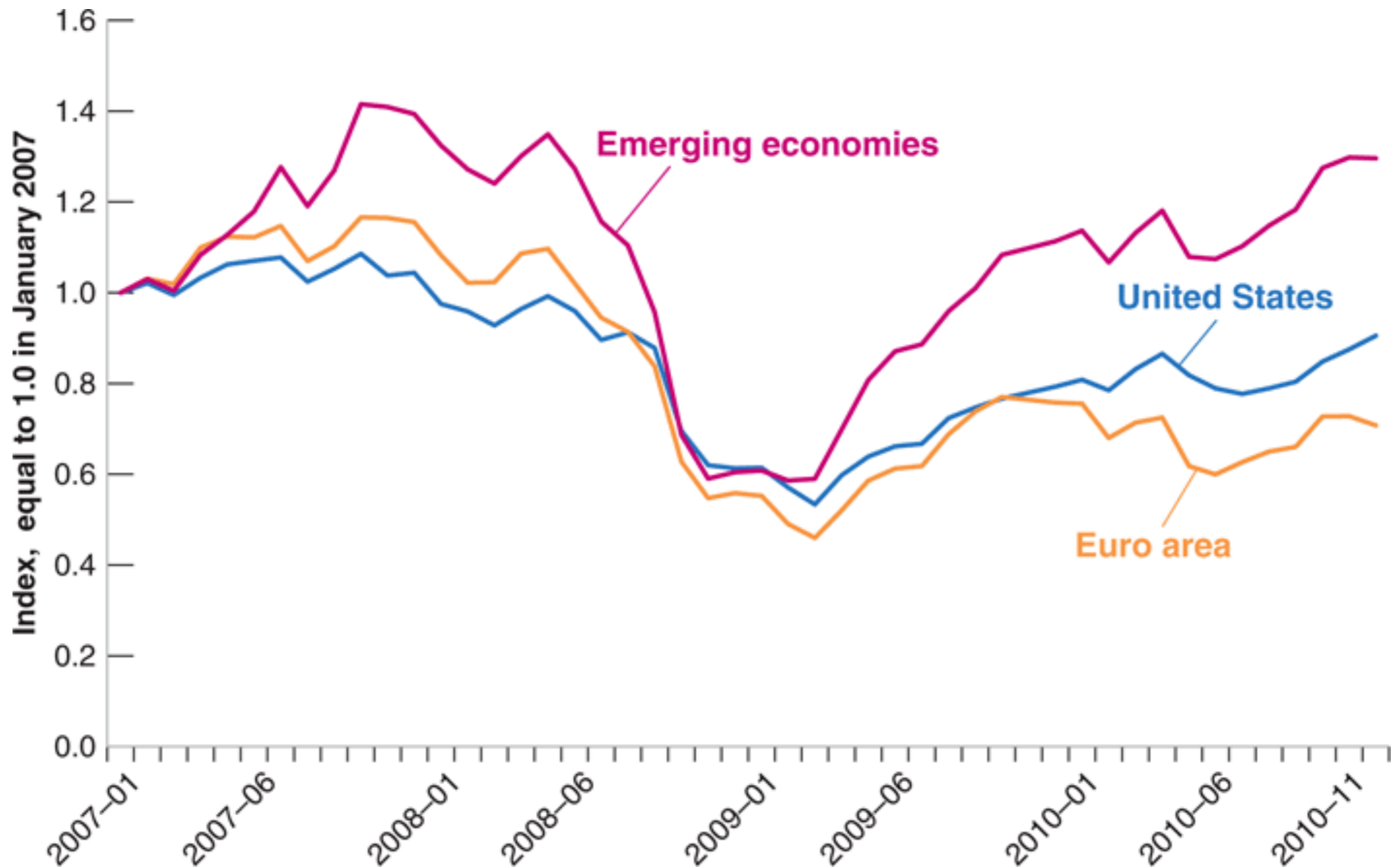
- 2001–2007: the world economy had a sustained expansion
- US housing prices started declining in 2007, leading to a financial crisis and a major economic crisis: **US unemployment rate increased from 4.4% in 2007 to 9.9% in 2009**
- through trade & finance, US crisis became a world crisis
- one possible (partial) explanation for the recession
 - house and stock prices collapsed in 2007–2008
 - people lost confidence and cut consumption
 - and people's wealth collapsed so they cut consumption
 - the drop in willingness to consume = negative AD shock → recession

SOURCE OF GREAT RECESSION: HOUSING?

Real Home Price Index (1953=100, ratio scale)



STOCK PRICES DURING THE GREAT RECESSION



GOOGLE SEARCH FOR “GREAT DEPRESSION” DURING GREAT RECESSION

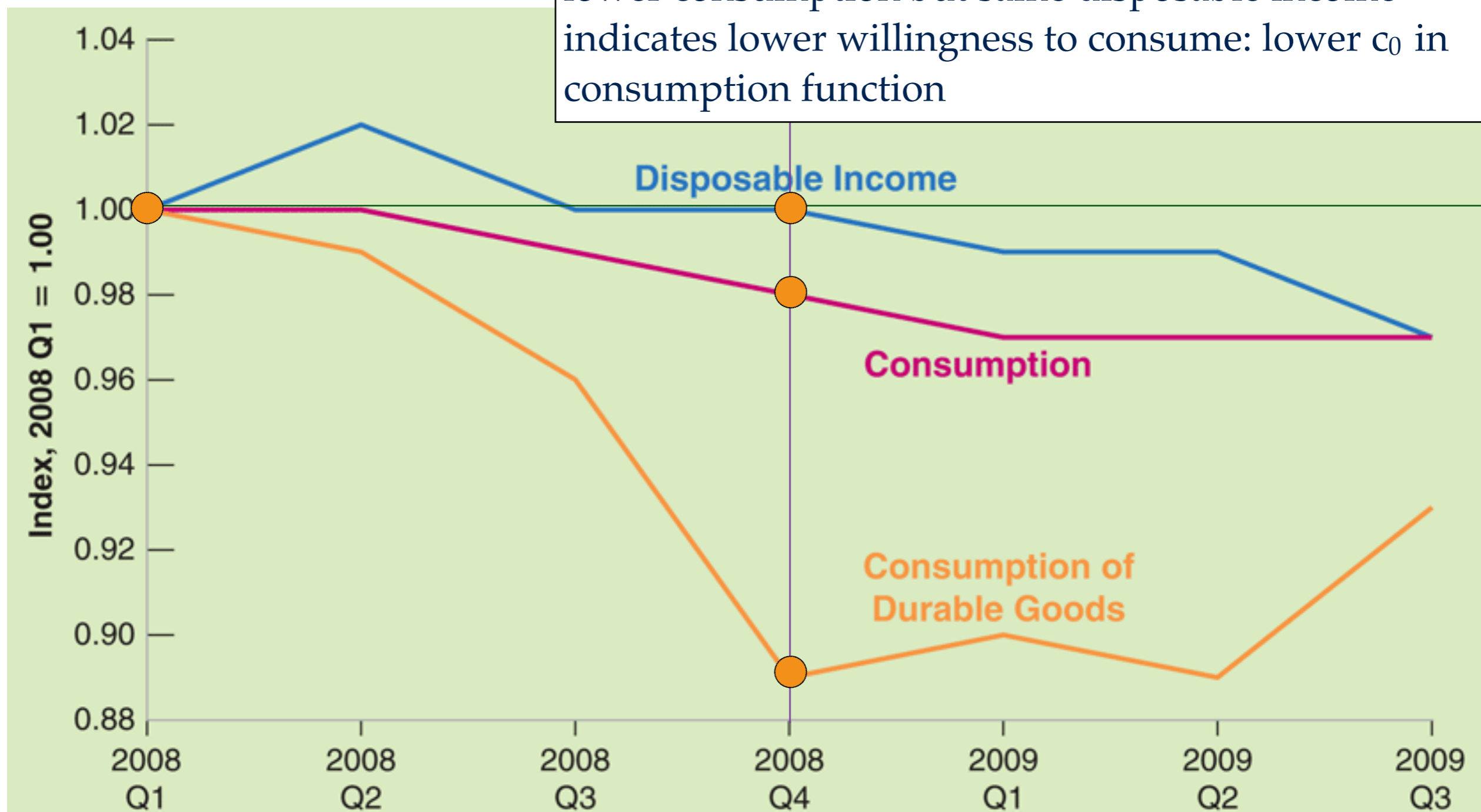
- bankruptcy of Lehman Brothers in 09 / 2008
- fear of a new Great Depression spread rapidly



Source: Google Trends, "Great Depression."

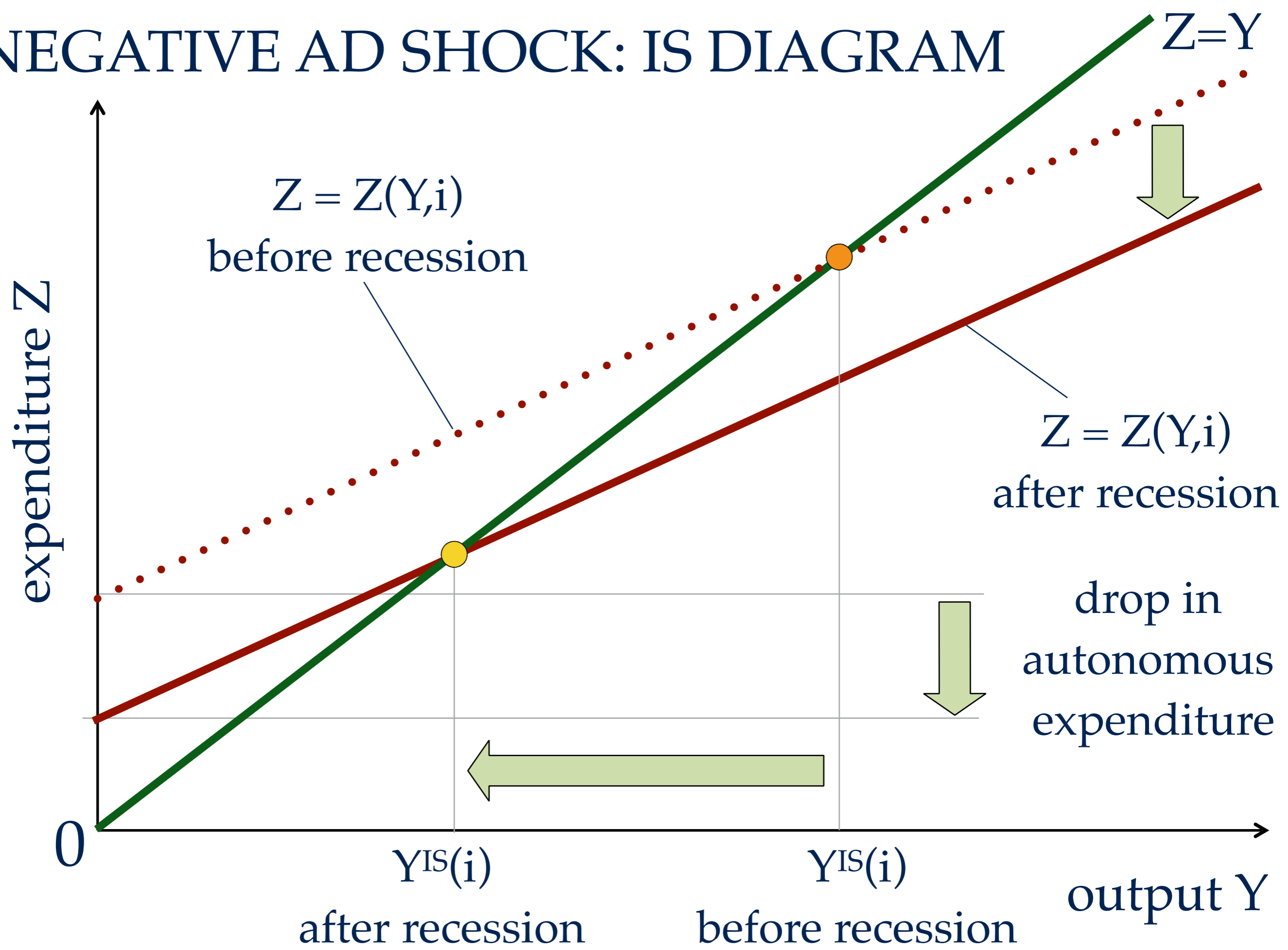
DECLINE IN WILLINGNESS TO CONSUME

lower consumption but same disposable income indicates lower willingness to consume: lower c_0 in consumption function

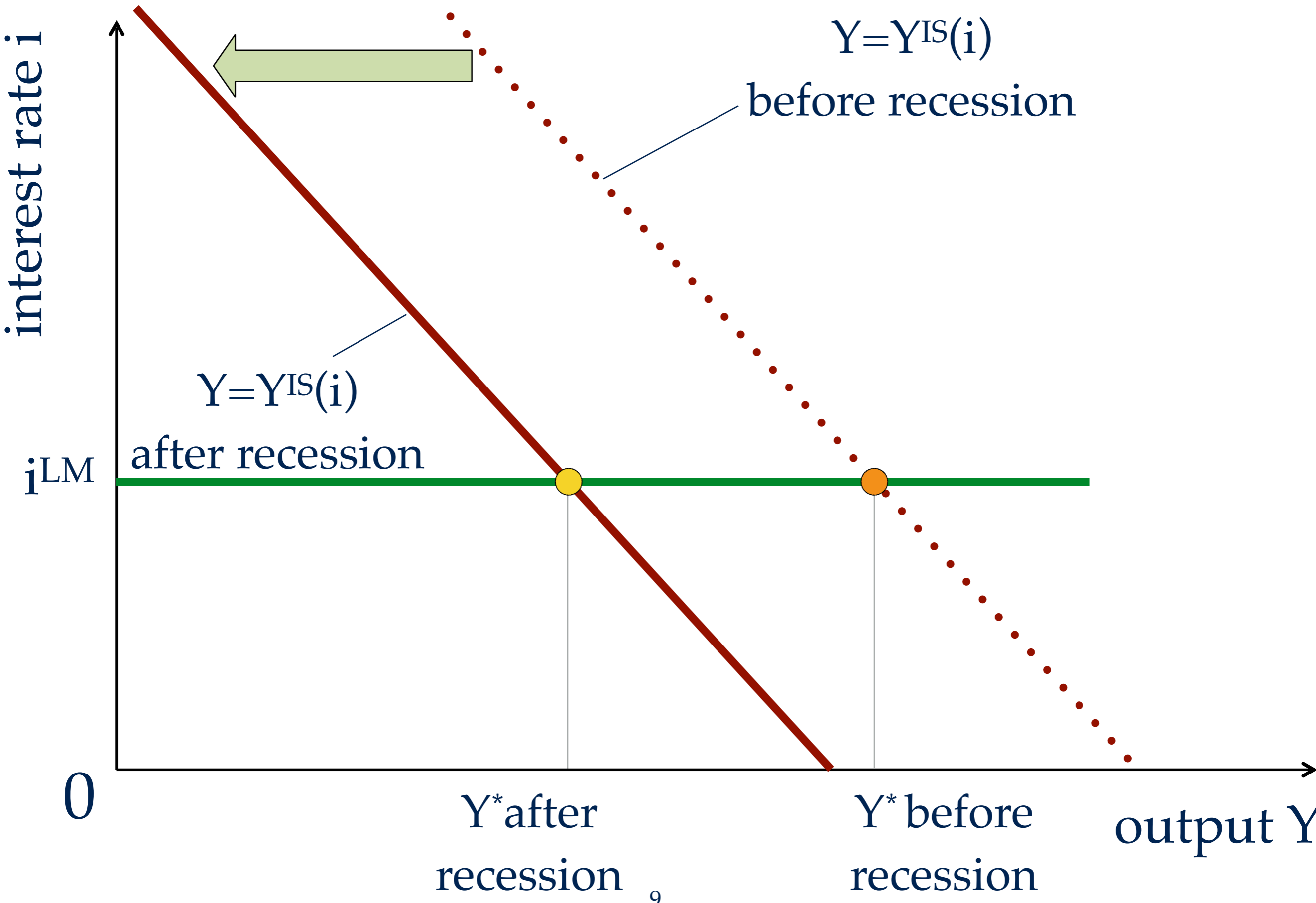


Source: Calculated using series DPIC96, PCECC96, PCDGCC96: Federal Reserve Economic Data (FRED)
<http://research.stlouisfed.org/fred2/>

NEGATIVE AD SHOCK: IS DIAGRAM



NEGATIVE AD SHOCK: IS-LM DIAGRAM



MANIFESTATION OF THE PARADOX OF THRIFT

- at the onset of Great Recession, consumers decided to save more, so c_0 decreased
 - private saving is $S = -c_0 + (1 - c_1) \times D$
- autonomous expenditure decreased
- so equilibrium income in IS submodel decreased
 - equilibrium income = autonomous expenditure \times spending multiplier
- hence, at the onset of Great Recession, the IS curve shifted inward, while the LM curve stayed the same

MANIFESTATION OF THE PARADOX OF THRIFT

- IS-LM equilibrium: same interest rate i^* , but lower GDP Y^*
- hence investment $I^* = I(Y^*, i^*)$ fell
 - the investment function $I(Y, i)$ is increasing in Y but decreasing in i
- in equilibrium: private saving = investment – public saving
 - public saving = $T - G$ remained the same
- so paradoxically, since investment fell, private saving fell!

THE DOT-COM-BUBBLE RECESSION, 2001

- the US stock market boomed in 1995–2000, driven by the increase in the valuation of Internet-based firms (dot-com firms)
- the US stock market crashed in March 2000 and continued to fall until 2002
- this crash triggered a mild recession: **US unemployment increased from 3.8% to 5.7% in 2001**
- one possible explanation for the recession:
 - stock prices collapsed in 2000–2002
 - people lost confidence and cut consumption
 - and people's wealth collapsed so they cut consumption
 - the drop in willingness to consume = negative AD shock → recession

DOT-COM BUBBLE: NASDAQ

