

# The U.S. Recession of 2007-2010

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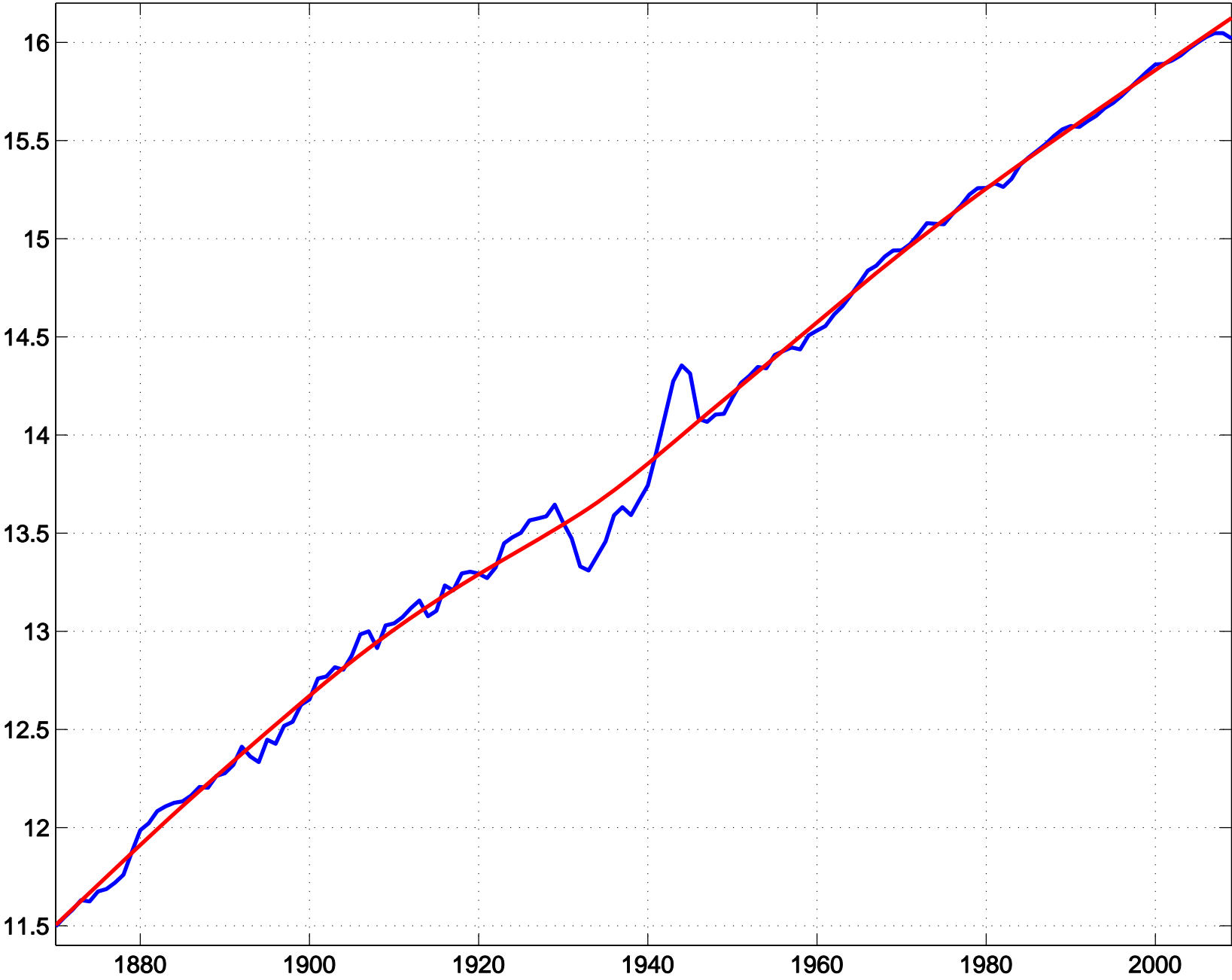
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- The recession that followed the U.S. banking crisis of 2008 was the deepest since the 1930s and recovery has been painfully slow
- Right to focus on policies to alleviate recession, aid recovery
- But other considerations important too:
  - long term growth in productive capacity
  - efficient use of resources
- Need to evaluate economy's performance on all three dimensions

# U.S. Economy: Essential Background

- In long run, U.S. production grows at about 3% per year. Per person, 2%
- Maintained for more than a century
- Occasional displacements—wars, depressions—then return to trend

U.S. REAL GDP, 1870-2008, LOG SCALE

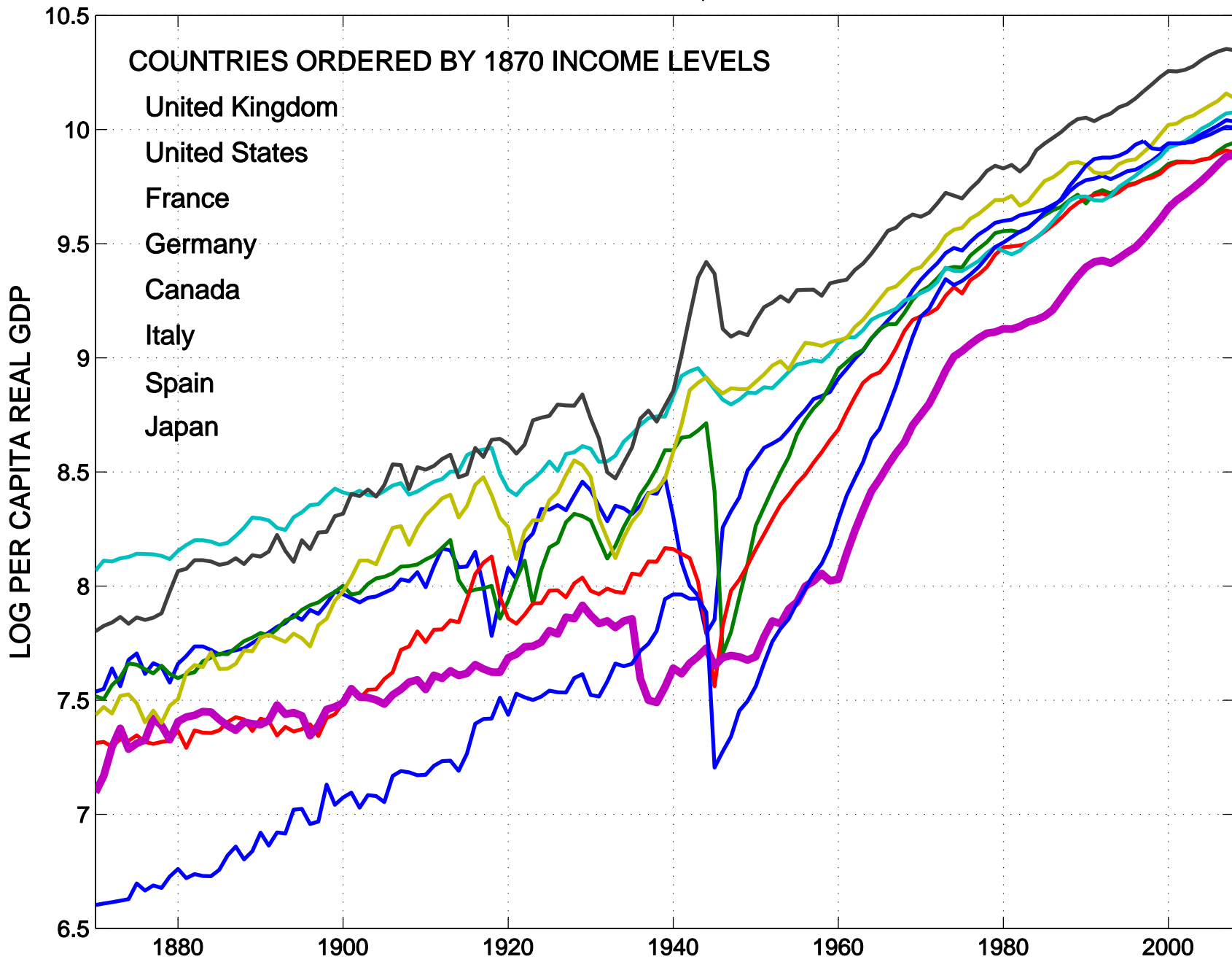


- Surely main feature of this graph is remarkable growth record
- Real income per person in U.S. increased by factor of 12 over the 1870 - 2010 period; factor of 4 in my lifetime (so far!)
- Government provided stable background for this achievement, good education for all: both important
- But this ongoing miracle is mainly due to free-market capitalism

## Other successful economies

- Nothing unique to U.S. in this long term growth miracle
- Next figure plots 1870-2008 real incomes in 8 large, successful economies
- These are **per capita** gdp's (not total, as in U.S. graph)

# INCOME CONVERGENCE, EIGHT COUNTRIES



- Throughout period, US or UK leader: both grew at  $\sim 2\%$
- Initially wide diversity in 1870
- Japan very poor; Spain, southern Europe poor relative to north
- But all these countries grew faster than US, UK on average
- Why not? A common civilization, technology. Backward learn from advanced: “catch-up growth”



- Note that most of catch-up came after WWII
- For Europe, N. America, Japan an era of relative peace, free trade
- Through 1960s, every reason to foresee a common, high living standard for all of us
- But then—in 1970s—catch up stalled

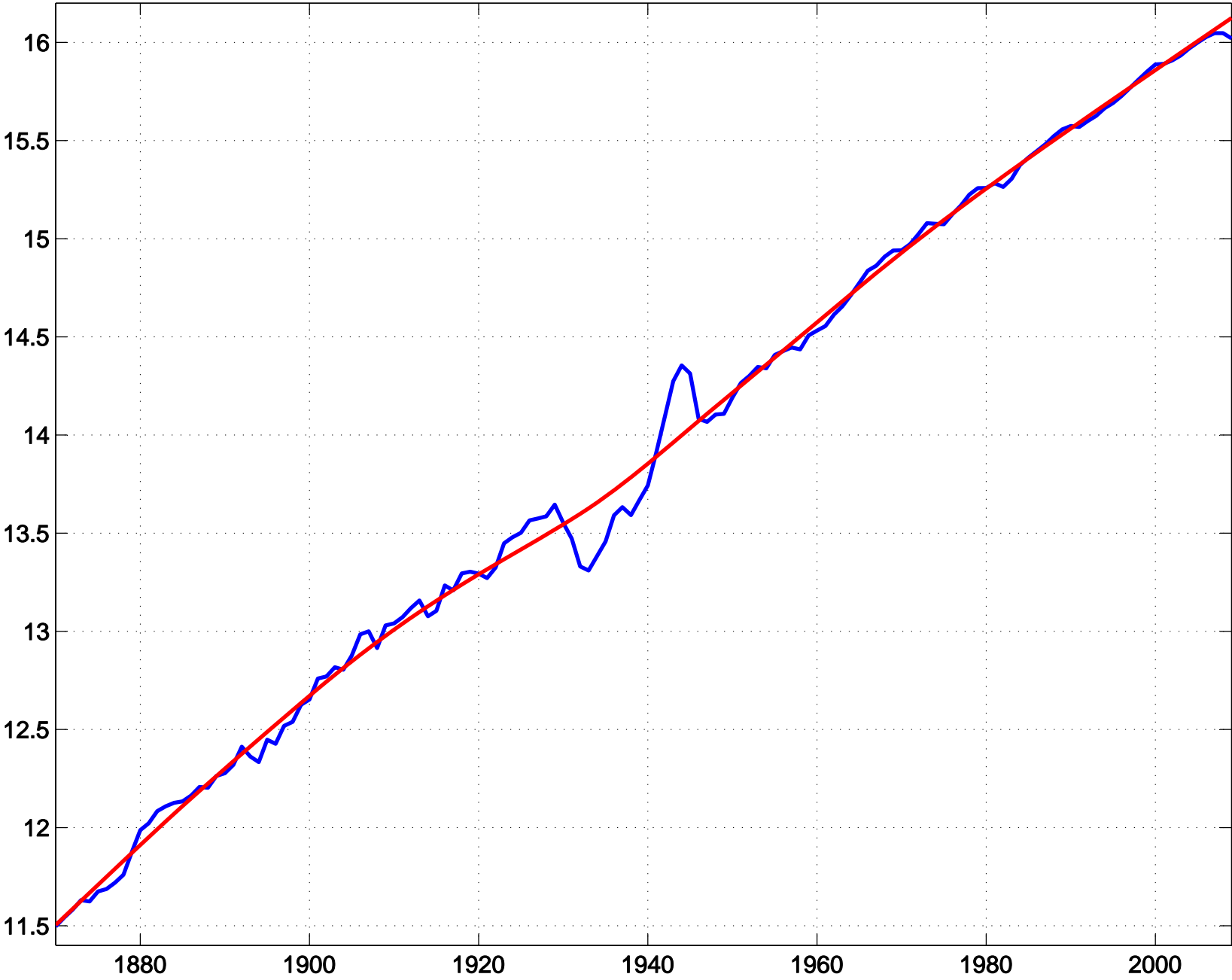
- Don't see this in growth rates—still  $\sim 2\%$  for all of the rich economies
- But — 20-40% gap has emerged, stabilized in income **levels**
- Why? Views differ.
- Mine is that European tax, regulatory structures discourage savings, work effort relative to U.S.
- If so, 20-40% gap represents cost of larger welfare state

- Sum up: Two most important features of overall economic performance are:
  - long term real growth: essentially common to all successful economies
  - level of per capita income relative to “best practice”: substantial differences even among the advanced economies—policies do matter
- But announced topic was recessions, not growth
- These are important, too

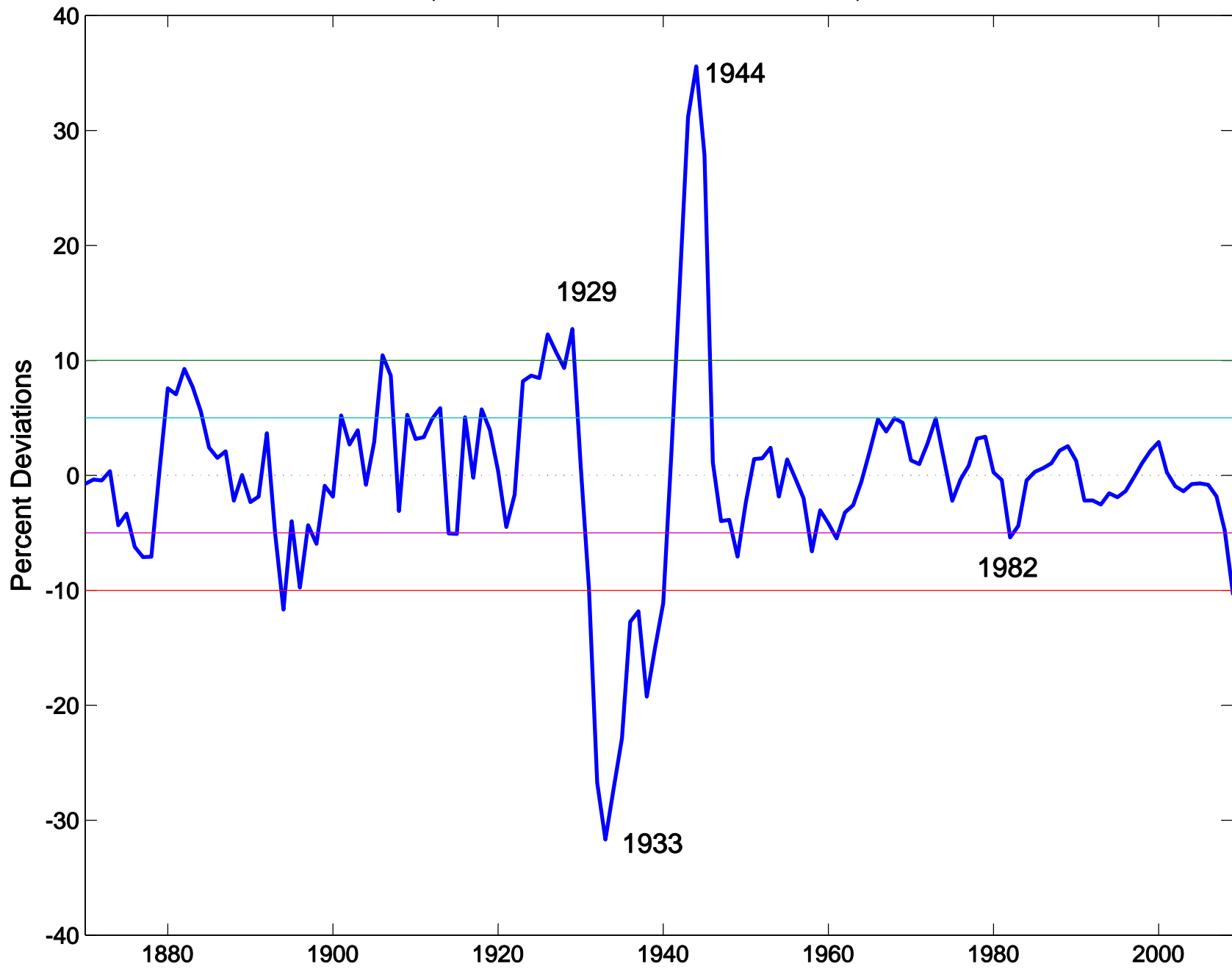
# Depressions and recessions in U.S.

- Show two figures:
  - Deviations from trend in long term annual data, 1870-2008
  - Deviations from trend in current recession, quarterly U.S. data though 2nd quarter of 2010

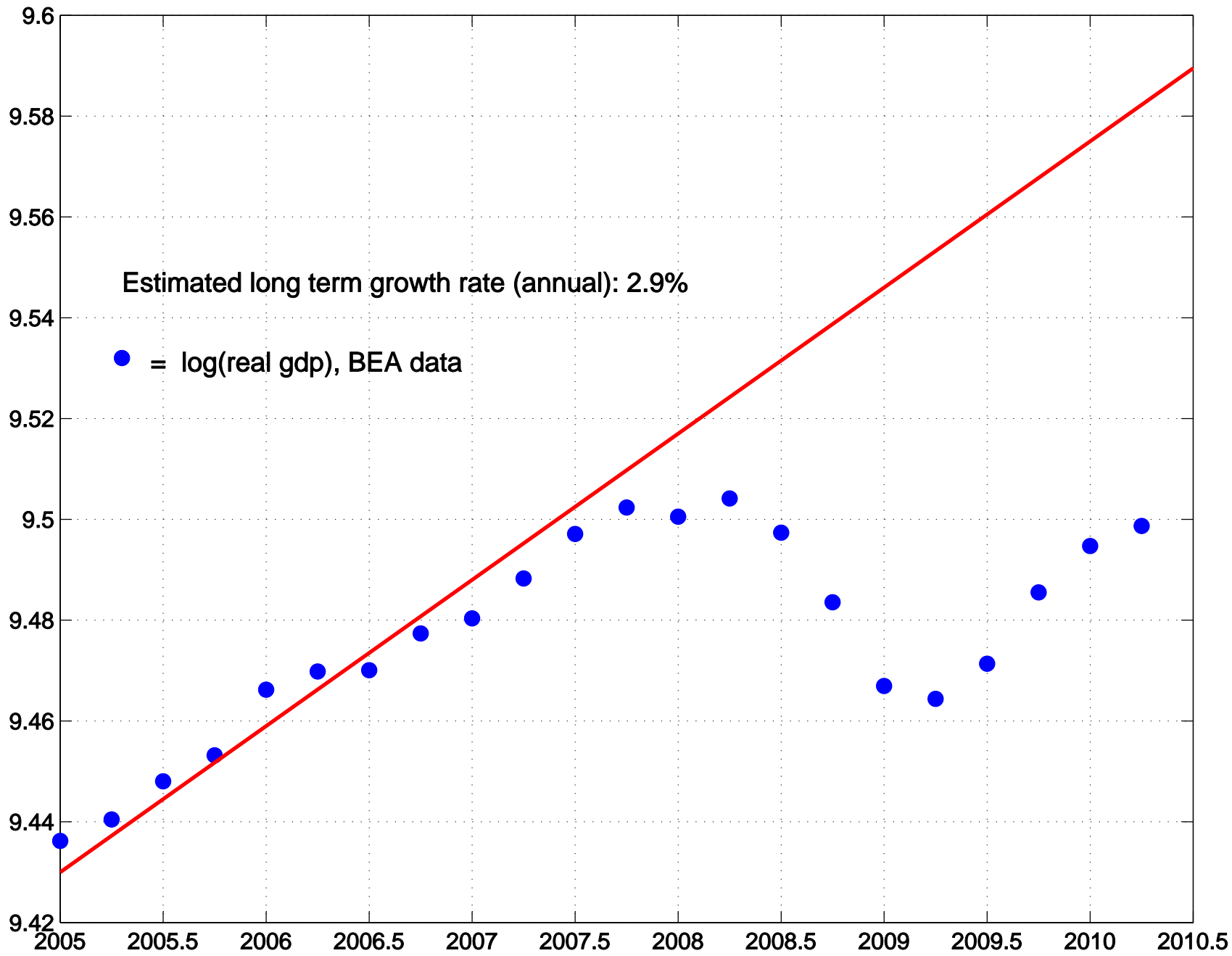
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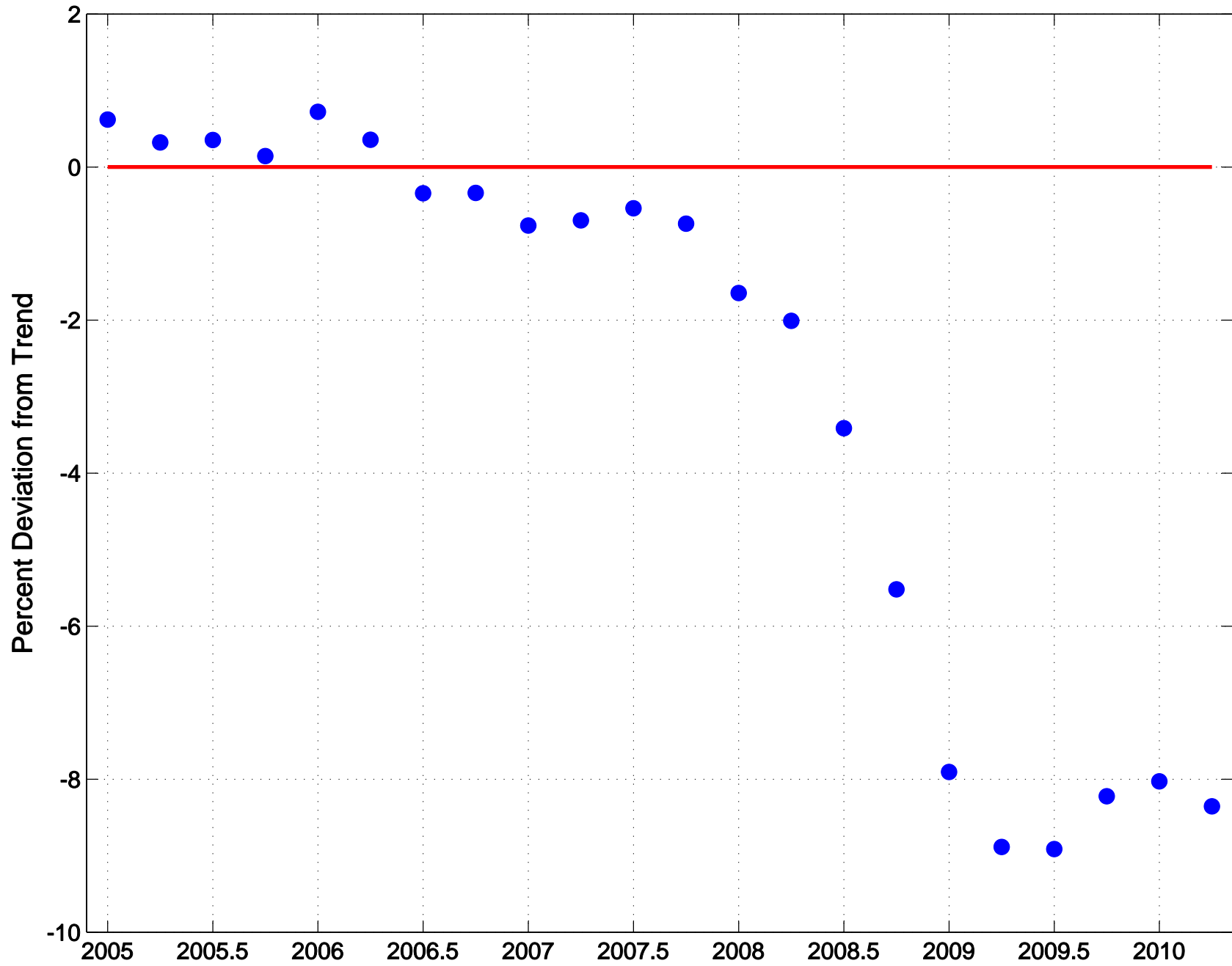
U.S. GDP, DEVIATIONS FROM TREND, 1870-2008



# U.S. RECESSION OF 2006 - 2010



# U.S, RECESSION: GDP DEVIATIONS FROM TREND

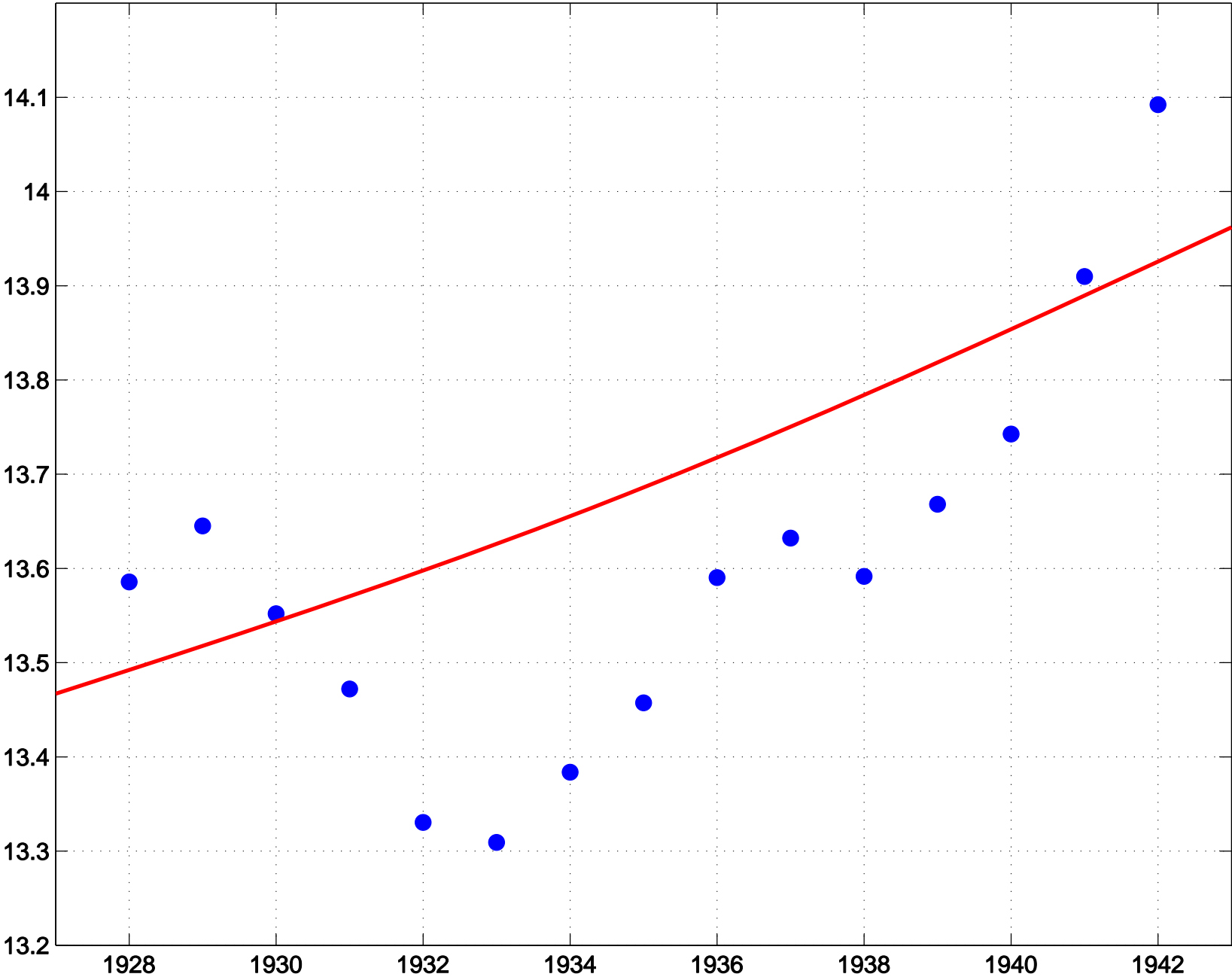




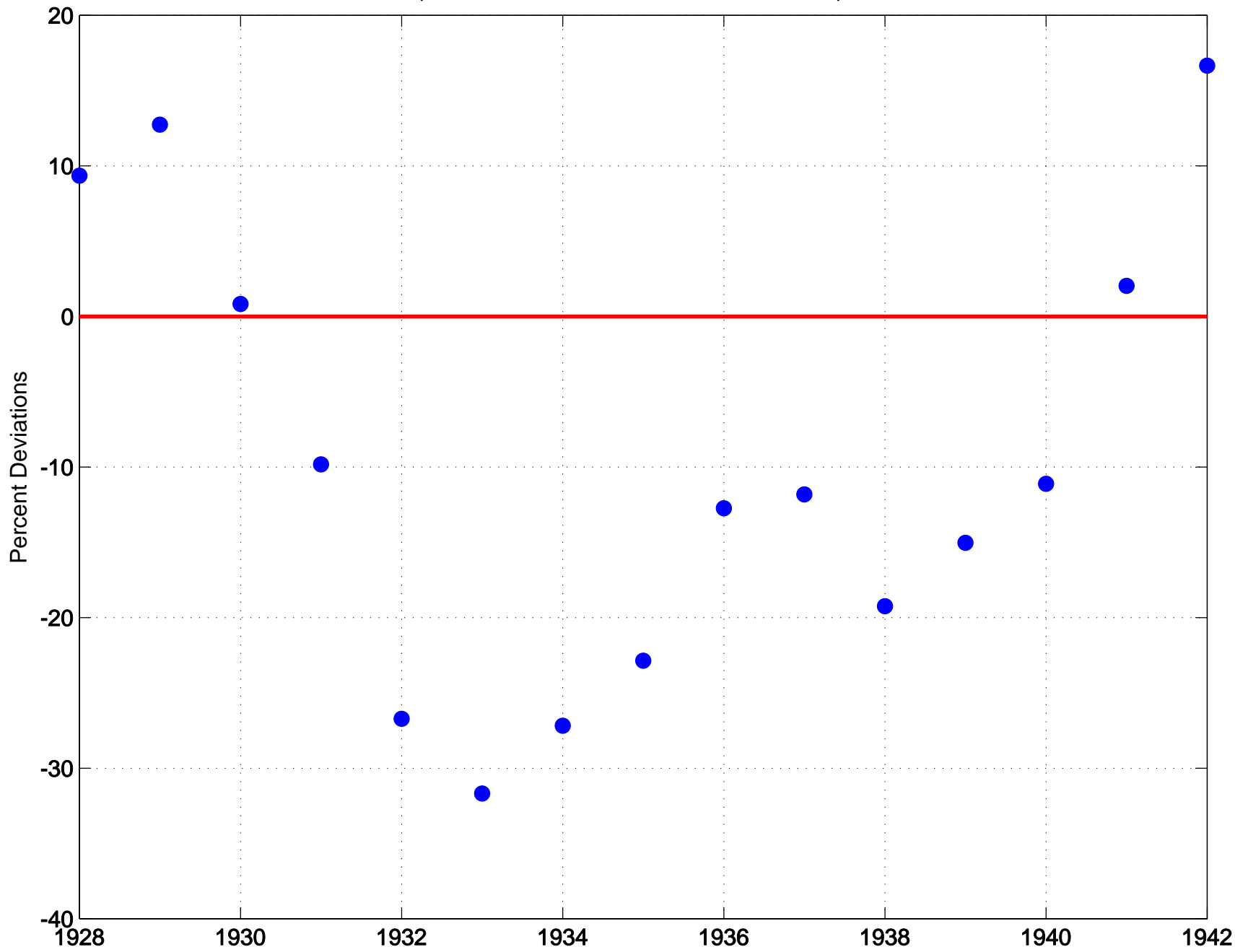
- What does this history show?
- Most recessions—especially since WWII—are not every important events. Who remembers them?
- Depression of 1930s and the current one are both much deeper, more prolonged than typical
- In 1933, U.S.,. GDP more than 30% below trend
- U.S. now almost 10% below trend
- These singular events have much in common: Useful to explore this

The U.S. depression of the 1930s

U.S. REAL GDP, LOG SCALE, 1928-1942



U.S. GDP, DEVIATIONS FROM TREND, 1928-1942



- Great Contraction of 1929-33: decline in real GDP of 34% between 1929 and 1933
- Average negative growth of 8% per year
- Economy remained more than 10% below trend until 1941—more than 10 years
- No war, natural disaster.
- No change in American **ability** to produce
- What happened?

- Over same four years, price level fell 24%
- Average of 6% deflation
- Add these to get a 58% decline in dollar value of spending on goods and services
- These changes are far too large to be attributed to the stock market crash in October, 1929
- Comparable crashes before and after 1929 had no such effects

- What **did** change dramatically was bank deposits
- In 1929-33 three episodes of bank runs: 2 in 1930, one more in 1933
- Cumulative decrease over four years was 48%.
- Consider three questions in turn:
  - Why did deposits decline?
  - Why did this decline precipitate a depression?
  - What could have been done to reverse the decline?

## Why the decline in deposits?

- Demand deposits are promises to pay cash—currency—on demand
- Banks hold currency plus reserves (government supplied credits, convertible into currency on demand). But reserves always much less than 100%
- A fractional reserve banking system will **always** be fragile, subject to runs, a house of cards



## Why did the decline in deposits precipitate a depression?

- Individuals, business firms like to hold certain ratio of cash to spending flows
- Bank failures, decrease in deposits, meant sudden decrease in liquidity—cash and cash substitutes—held by public.
- To rebuild balances, businesses, households cut back on spending, trying to restore comfortable ratio of cash/bank deposits to spending flows
- 48% deposit decline resulted in 58% spending decrease

$$\text{In 1929: } \frac{\text{bank deposits}}{\text{GDP}} \approx 0.5$$

$$\text{In 1933: } \frac{\text{bank deposits}}{\text{GDP}} \approx 0.5$$

- Balance restored, but at what cost?
- Played out as deflation and reduction in production and employment

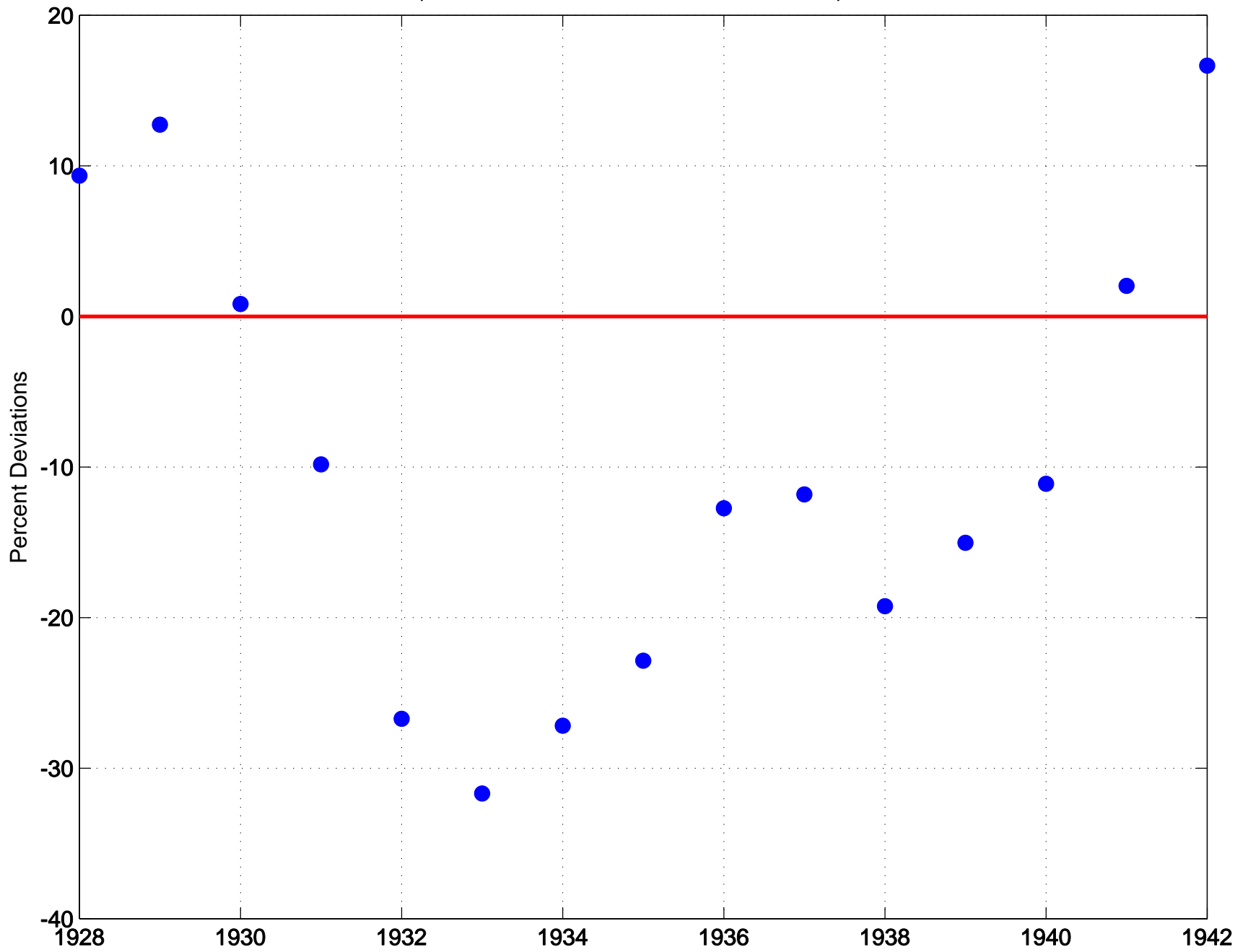
## What could have been done?

- Get more reserves—more cash—into the system
- Fed could have offset deposit decreases due to bank runs by increasing bank reserves, permitting/encouraging sound banks to expand deposits
- Instead, Fed stood by and watched
- Milton Friedman, Anna Schwartz argue that this Fed failure was the crucial policy mistake of the U.S. Great Depression.
- I agree.

## Why the slow recovery?

- By 1934, banking crisis completely resolved
- Deposit insurance in place, deflation over
- Yet full recovery was still 7 years away: Why?
- Monetary theory no help here

# U.S. GDP, DEVIATIONS FROM TREND, 1928-1942



- But recovery was retarded by number of harmful real policies
  - cartelization, price/wage fixing due begun in Hoover administration
  - Smoot-Hawley tariff of 1930
  - creation, support of large industrial unions
- Most important, in my view, but hardest to measure, were effects of demonization of business
- Businessmen were “malefactors of great wealth” (FDR)

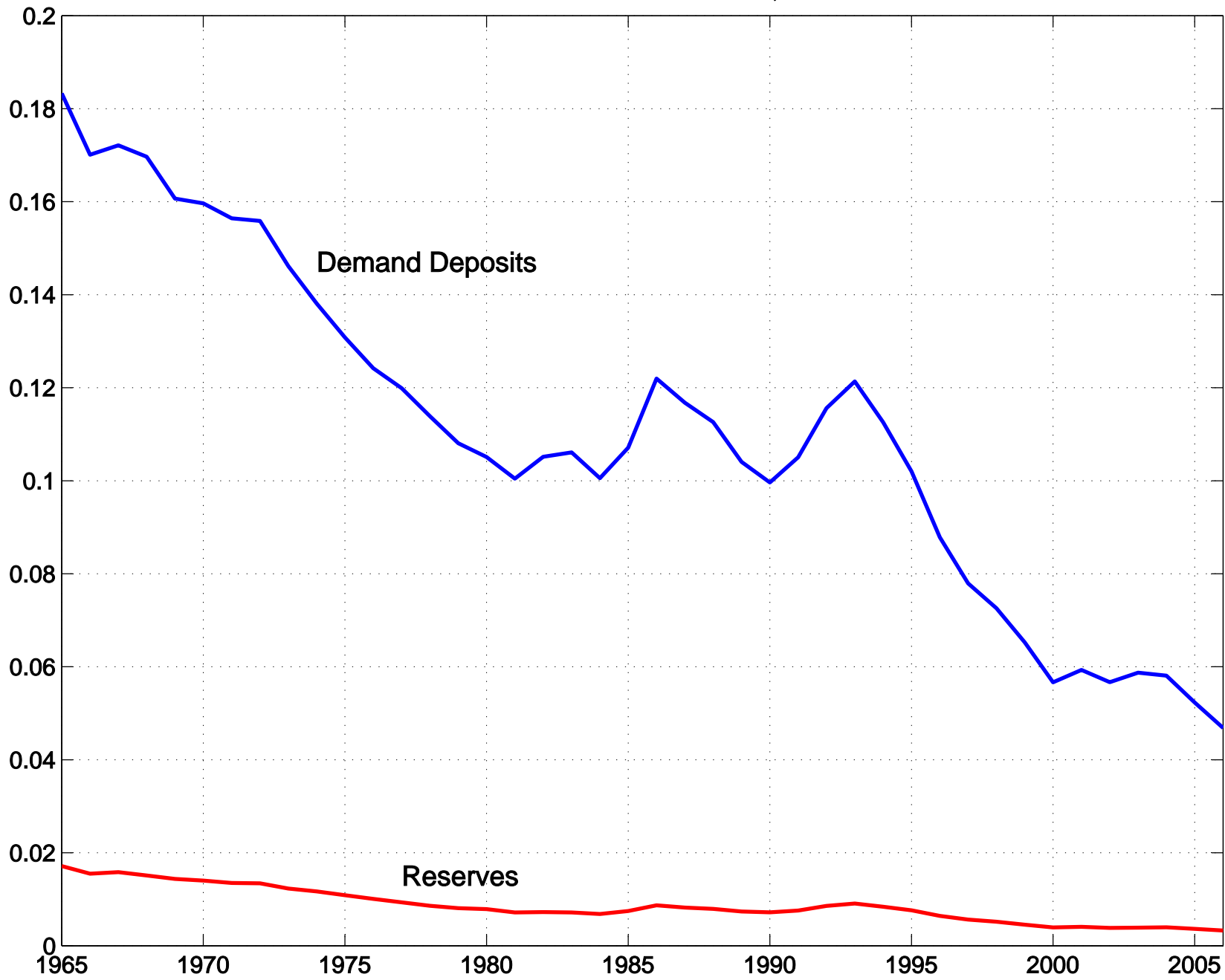
# The current U.S. depression

- Back to the present
- My view of 2007-08 crisis is based on parallels to 1929-33, but there are obvious differences between these situations that must be respected
- In 2008, there was much bank reorganization, but no bank runs, no deposits lost, no flight to currency
- Problem this time was not with commercial banks—now insured and safe

- But many banking services that were once provided by commercial banks have been taken over by investment banks
- Why?
- From 1933 until 1980s, commercial banks prohibited from paying interest on deposits
- Large depositors sought liquid assets with positive returns
- Motivation **greatly** intensified by inflation of 1970s



# DEMAND DEPOSITS AND RESERVES, RELATIVE TO GDP



- By 2000, then, businesses had moved most deposits out of commercial banks and into short run securities that yielded a better return and were thought to be safe from default risk
- Economically, the routine use of short term borrowing is identical to the issue of demand deposits: “you give me cash today, take it back (withdraw it, decline to roll it over) whenever you like”
- People extending short term credit to Lehman and other investment banks to get a slightly higher return than the T-bill rate did not think (or did not admit) that they were taking on risk, and neither did those who extended credit to them, accepting their Lehman paper as collateral

- Novel element is not issue of risky securities—need those as long as there are real risks to be shared
- It is increasing role that these played in the payments system
- In effect, “shadow banking system” was created, uninsured and unregulated
- The economics of the 2008 “credit freeze” following the Lehman Brothers failure were identical to the economics of the 1930s bank runs

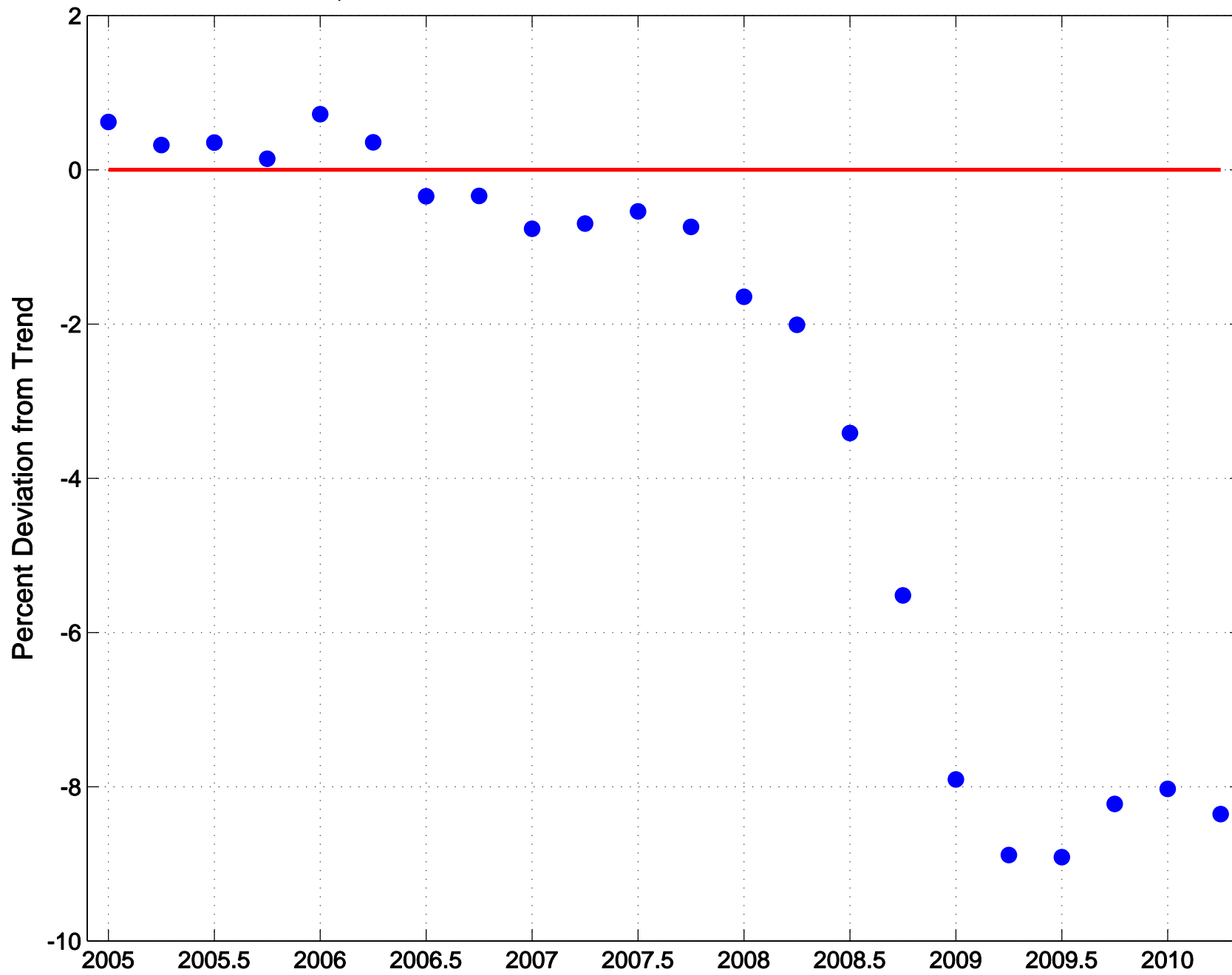
- The effects of the credit freeze were also similar to the effects of the bank runs of the 1930s
- A part of the effective supply of liquidity supply had vanished, other money-substitutes now became suspect, everyone wanted to get into government-issued or government-insured assets: reserves, currency, and insured deposits
- Could see this in the widening spreads between treasury bills and commercial paper, between government and corporate bonds, etc.
- A flight to currency? Not exactly. But a flight to government promises of currency, current or future
- All of this similar to earliest stages of the Great Depression

# Policy responses to the current U.S. depression

- In 1930, the Federal Reserve stood by and watched as spending and production declined
- In 2008, the Federal Reserve did exactly the opposite
- In August, 2008, there were \$45 billion of reserves in the banking system
- By the end of the year, there were \$821 b.
- The Fed acted boldly as lender of last resort, just as it should have done in 1930s, but failed to do

- Financial panic was over by end of 2008
- Too late to prevent deep spending declines in GDP in 2008-4 and 2009-1
- But there is world of difference between two quarters of production declines and four years!

# U.S, RECESSION: GDP DEVIATIONS FROM TREND



- Where do we go from here?
- Liquidity is no longer the problem:
  - banks have huge excess (above requirements) reserves
  - corporations are long on cash
- Yet business investment remains very low
- Unemployment remains very high
- Is this because government is not spending enough?

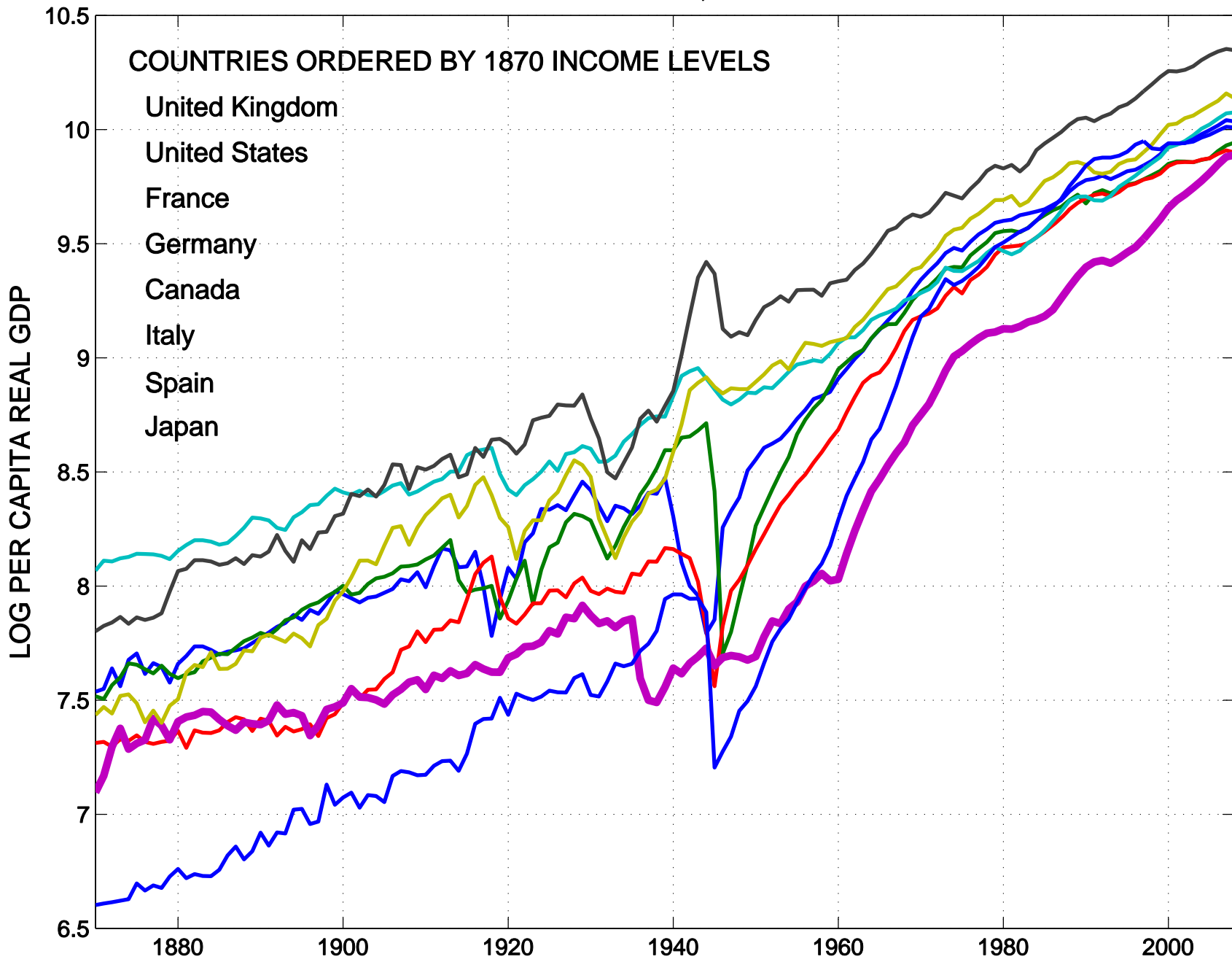


- Believe it is more accurate to say that the problem is government is doing too much, just as it was in the 1930s
- Likelihood of much higher taxes, focused on the “rich”
- Medical legislation that promises large increase in role of government, higher costs to employers
- Financial legislation that assigns vast, poorly-defined responsibilities to Fed, other regulators
- Are these conditions that foster a revival in business investment, consumer spending?

# Conclusion

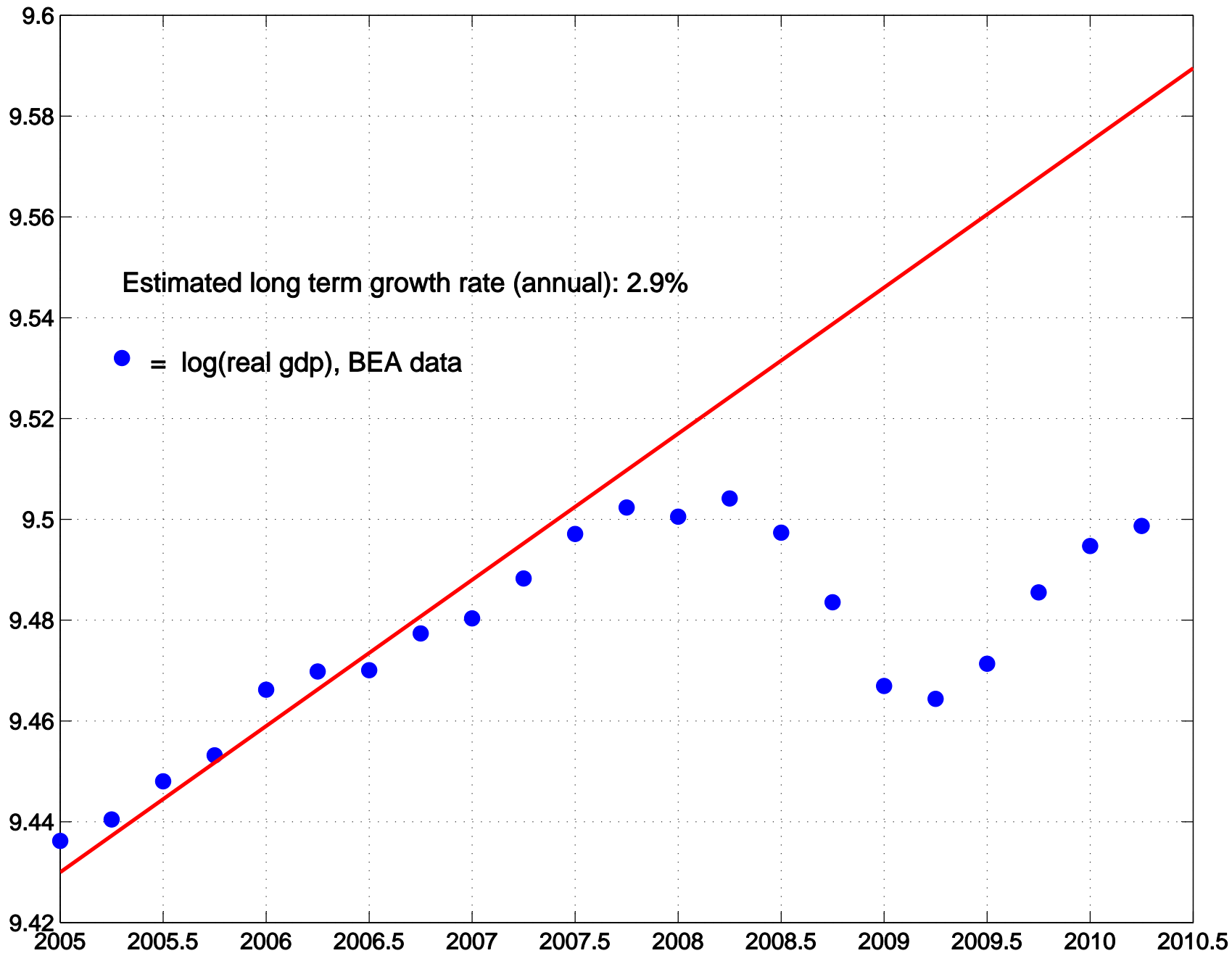
- Throughout this talk, I have defined recession as deviation from a 3% growth trend
- Implicit assumption is that economy will get back to old trend line—only question is how long it will take
- Is this really the case?
- Know that European economies have larger government role and 20-30% lower income level than US

# INCOME CONVERGENCE, EIGHT COUNTRIES



- Is it possible that by imitating European policies on labor markets, welfare, and taxes U.S. has chosen a new, lower GDP trend?
- If so, it may be that the weak recovery we have had so far is all the recovery we will get

# U.S. RECESSION OF 2006 - 2010



Gracias

# Logged PCE and PCE-Core with 2% Growth Line starting 2005Q3

— Logged PCE Deflator    — Logged PCE-Core Deflator    —

