

Europe's Standard of Living vs. the U. S.: Facts, History, and Diagnosis

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How today's Talk differs from the two papers

- “Data, History, Diagnosis”
- Data: Replace crude post-1950 data with the latest and best OECD/Groningen annual data: watch Europe fall back
- The paper went to 2000, now we go to 2004!
- History: The contribution is the organization of the facts and by time: 1870, 1913, 1950, 1973, 1995, 2000, 2004
- Diagnosis of Current European Malaise, partly new

Understanding the Facts: Y per capita vs. Y per hour

- Standard of Living = Income per capita
 - 1.3% growth, doubles every 53 years (Philippines)
 - 5.6% growth, doubles every 12 years (Korea)
- For very long-term growth or comparing rich and poor nations, Income per capita and productivity are the same thing
- Not the same thing for short-term or comparisons among rich nations
- Y per capita vs. Y per hour is the crux of understanding the data on Europe vs. U. S.

How Productivity is Related to Output per Capita

Output (Q) Equal to the product of:

- Productivity (Q/A)
- Hours per Employee (A/E)
- Employment Rate (E/L), that's just $(1 - U/L)$
- Labor-force Participation Rate (L/N)
- Working-age Population (N)

$$\frac{Q}{N} \equiv \frac{Q}{A} \cdot \frac{A}{E} \cdot \frac{E}{L} \cdot \frac{L}{N}$$

How Could Europe be So Productive Yet So Poor

Output per Capita (Q/N)

In Europe 75% of U. S.

Productivity 95% of U. S.

The Difference:

- Hours per Employee (A/E)
- Employment Rate (E/L)
- Labor-force Participation Rate (L/N)

$$\frac{Q}{N} \equiv \frac{Q}{A} \cdot \frac{A}{E} \cdot \frac{E}{L} \cdot \frac{L}{N}$$

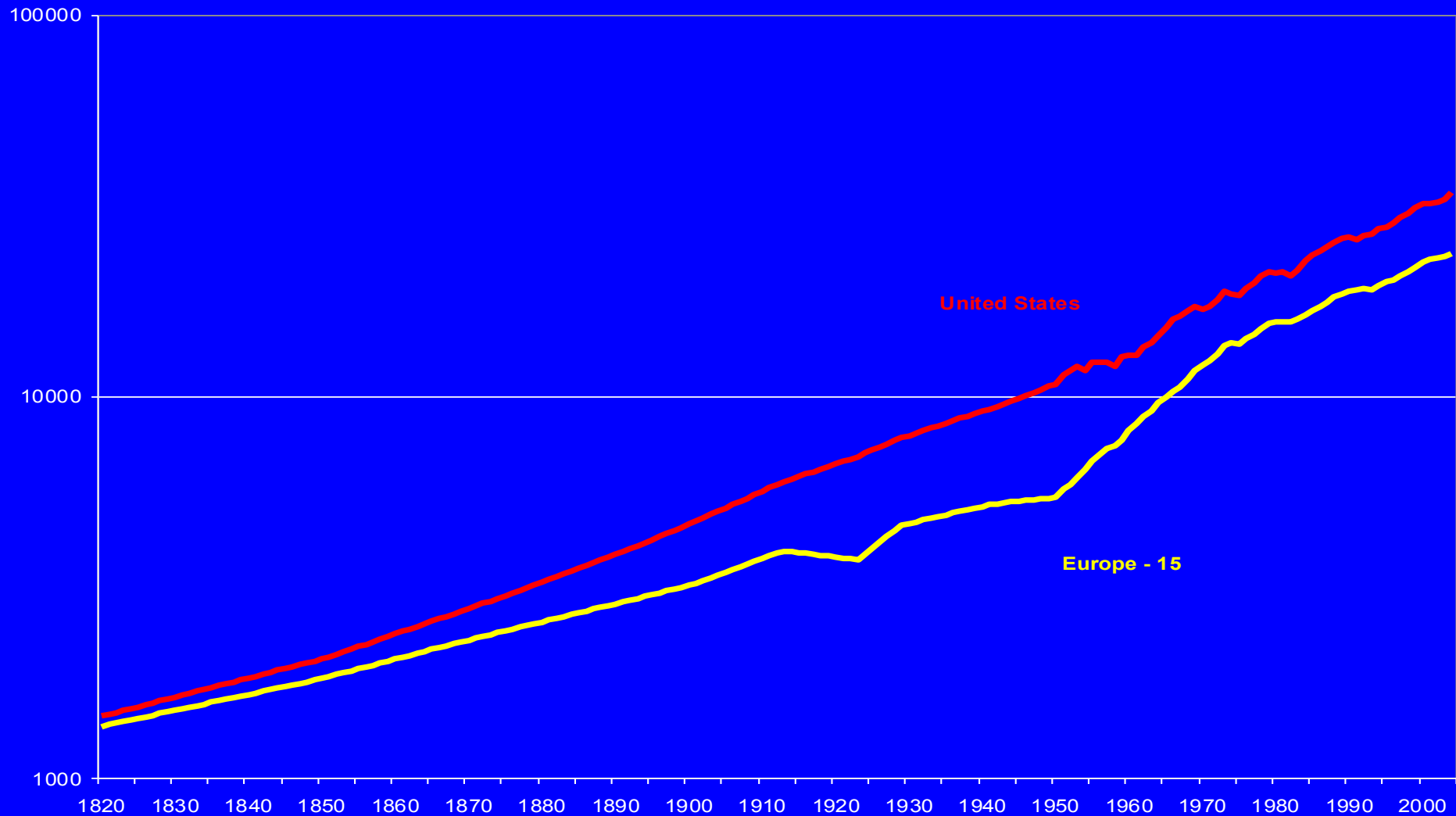
Europe vs. the U. S. since 1870

- The History: Europe falls back 1870-1950 and then catches up
- The catch-up in 1995 was almost complete in productivity (Q/A)
- The catch-up since 1970 has been incomplete in output per capita (Q/N)
- Why?
 - The collapse of Europe's A/N
 - Why? The Disagreement with Blanchard
 - Q/A: Europe is no longer catching up but falling back. Why?

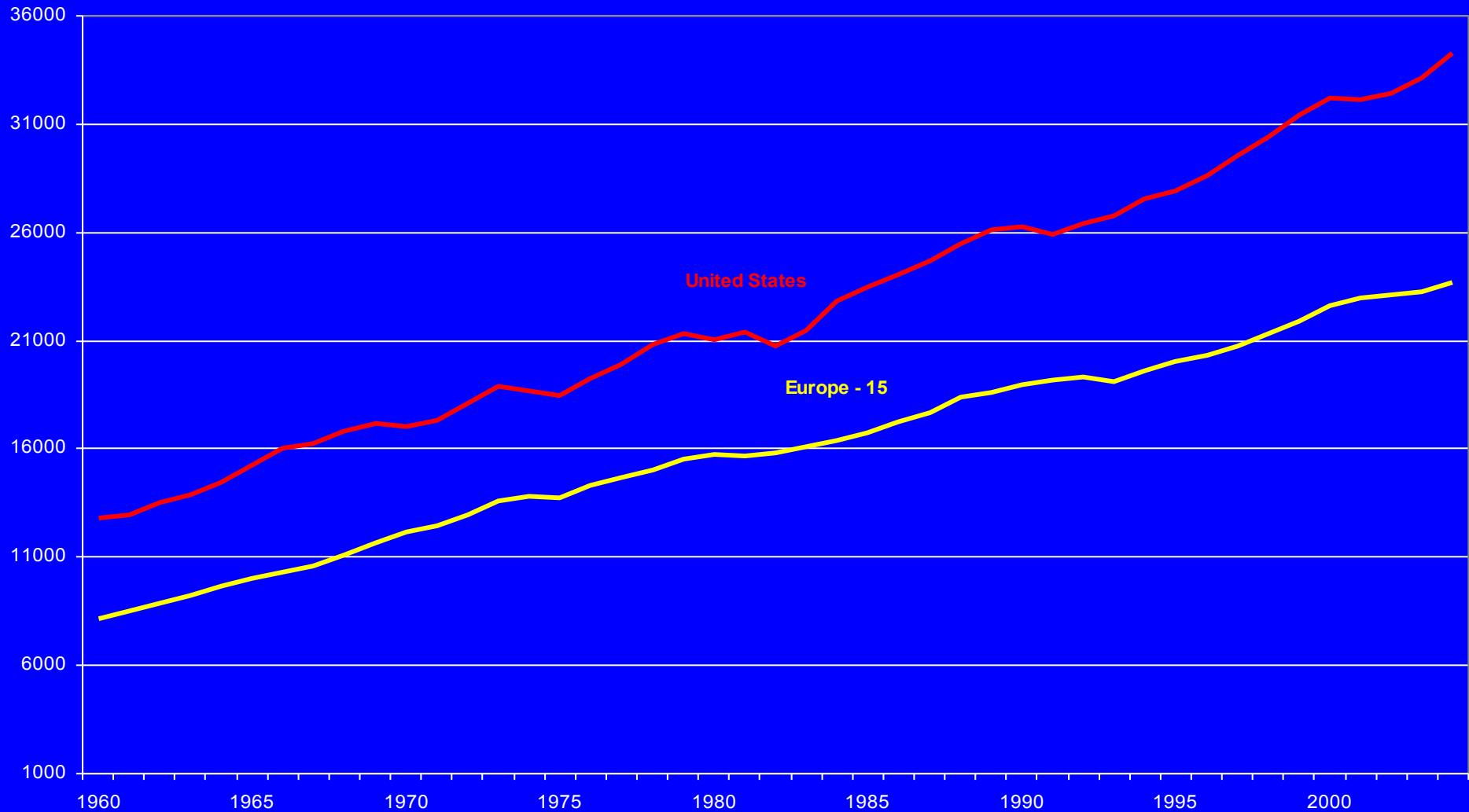
Part #1: Lots of Data Slides, What are the Data Issues?

- Thanks to Peter Neary AER Dec 2004:
 - Geary vs. EKS vs. “QUAIDS”
- Alternative methods of converting Ypc to international PPP
 - Maddison (1820-1950) uses Geary-Khamis
 - OECD uses EKS
 - Groningen web site gives both
- My calculations from Neary for EU-15
 - 1980 Neary preferred QUAIDS = 74
 - Average Groningen GK and EKS = 74

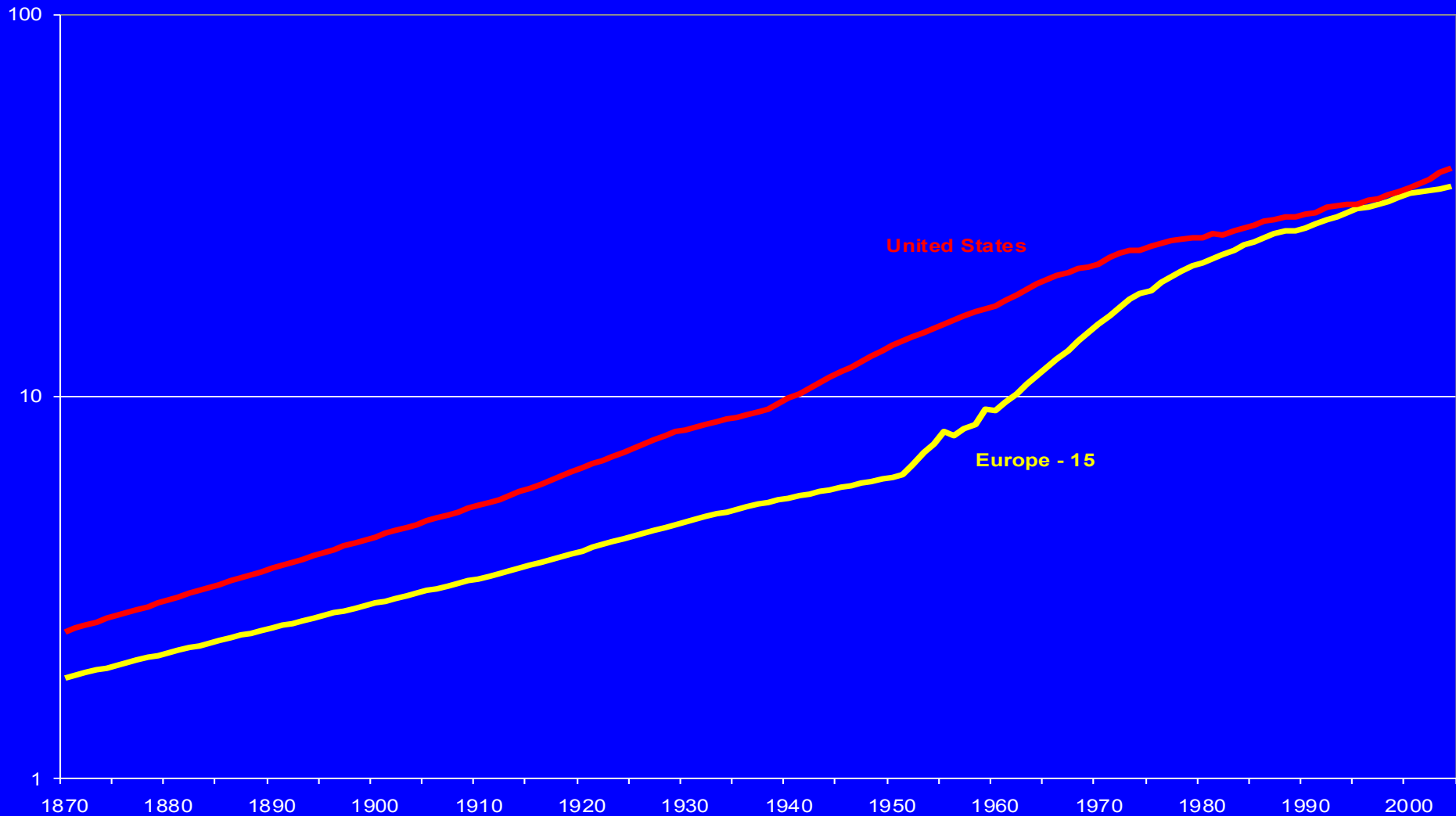
The Broad Sweep of 2 Centuries: Income per Capita



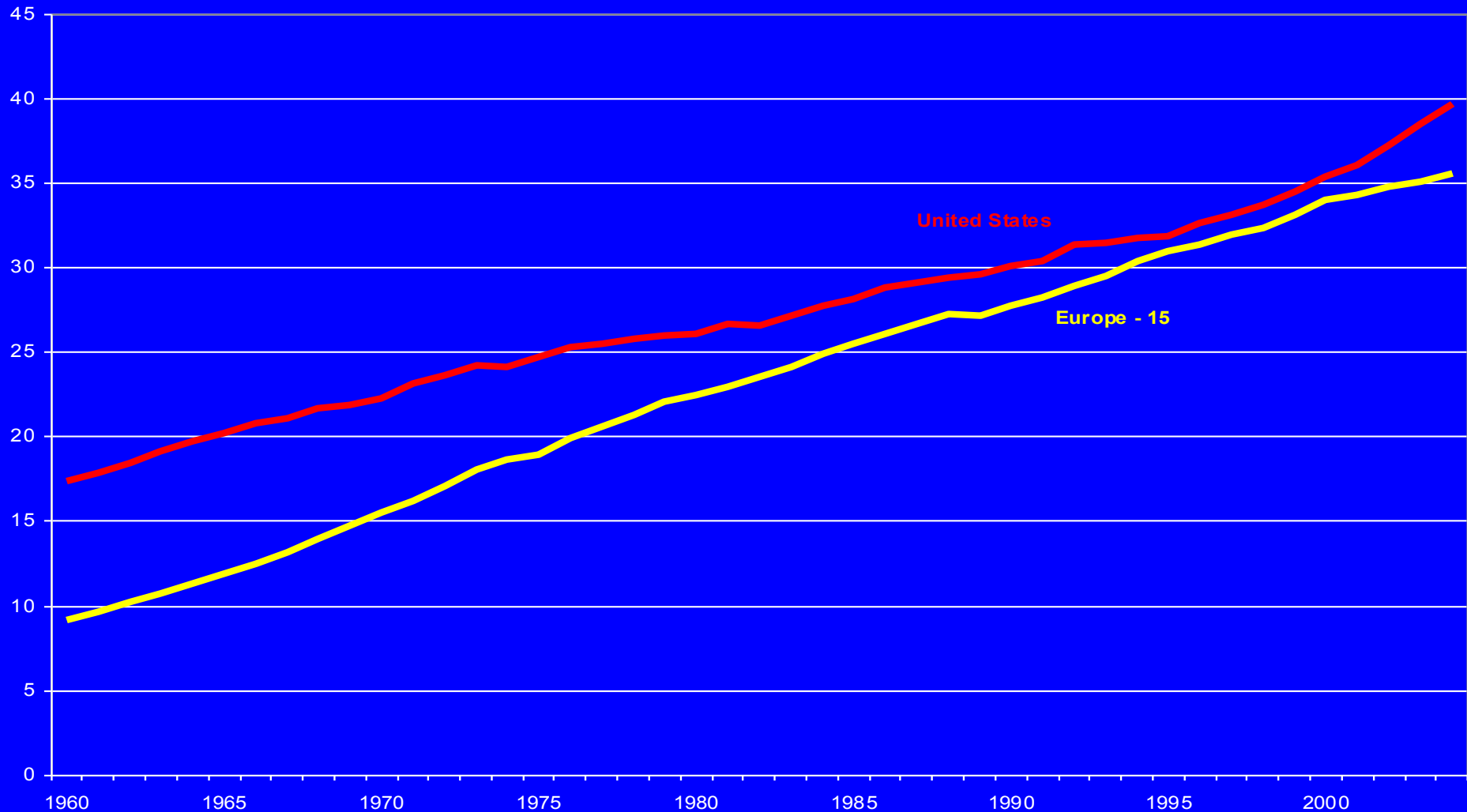
Since 1960: Europe Fails to Converge and then Falls Behind



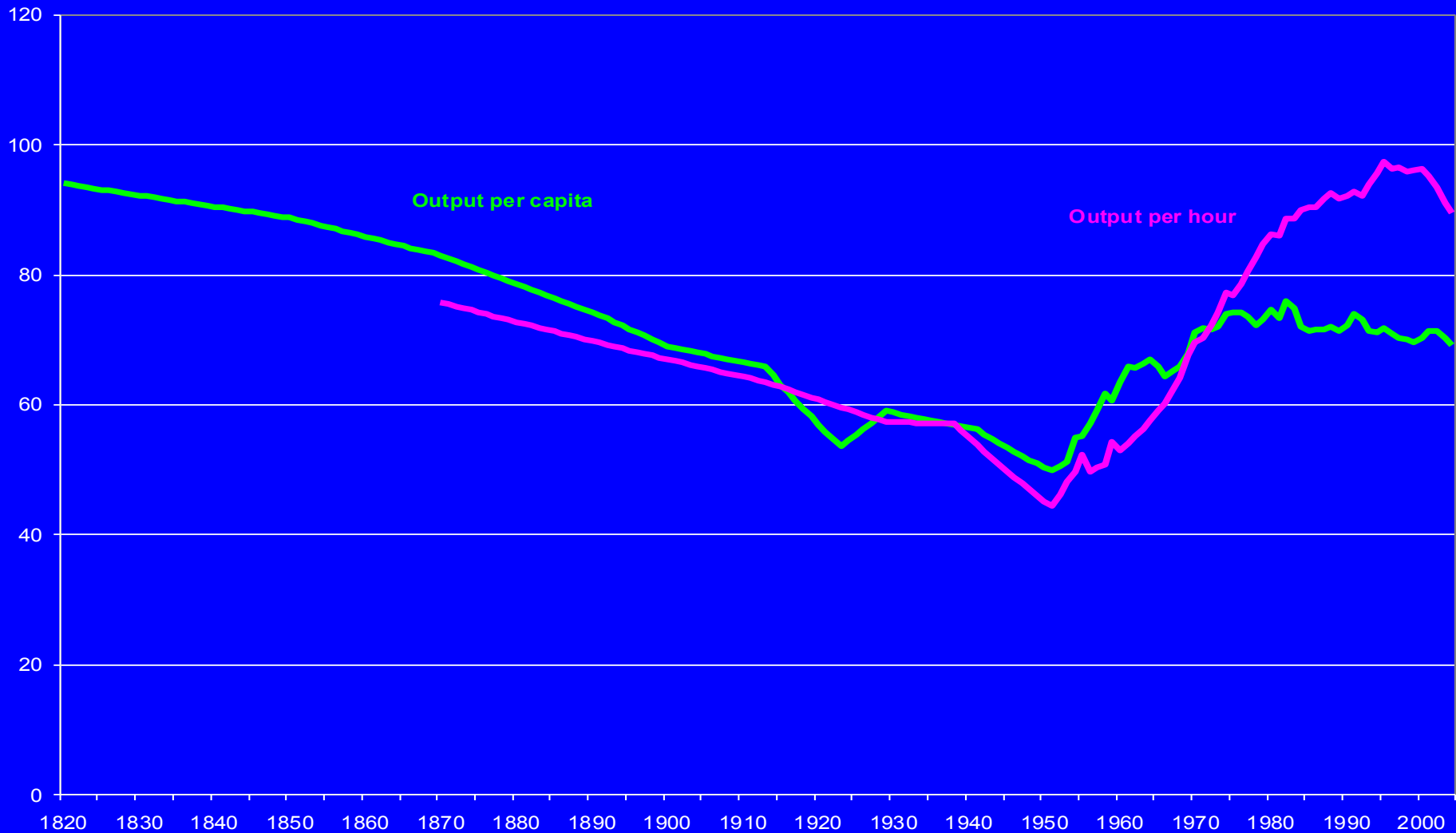
Productivity since 1870: Almost Catching Up is Not Enough



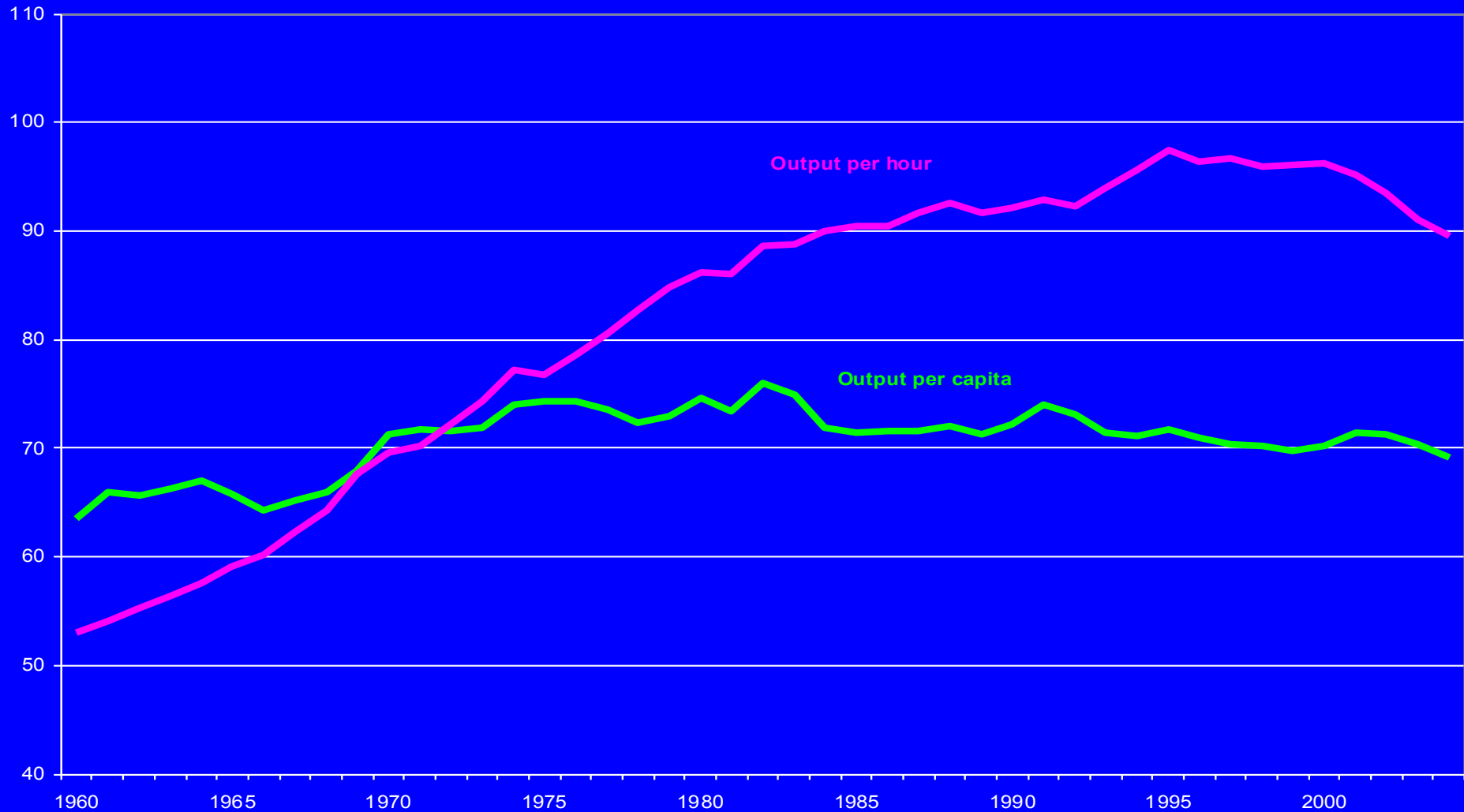
Productivity: A Closer Look at Post-1960



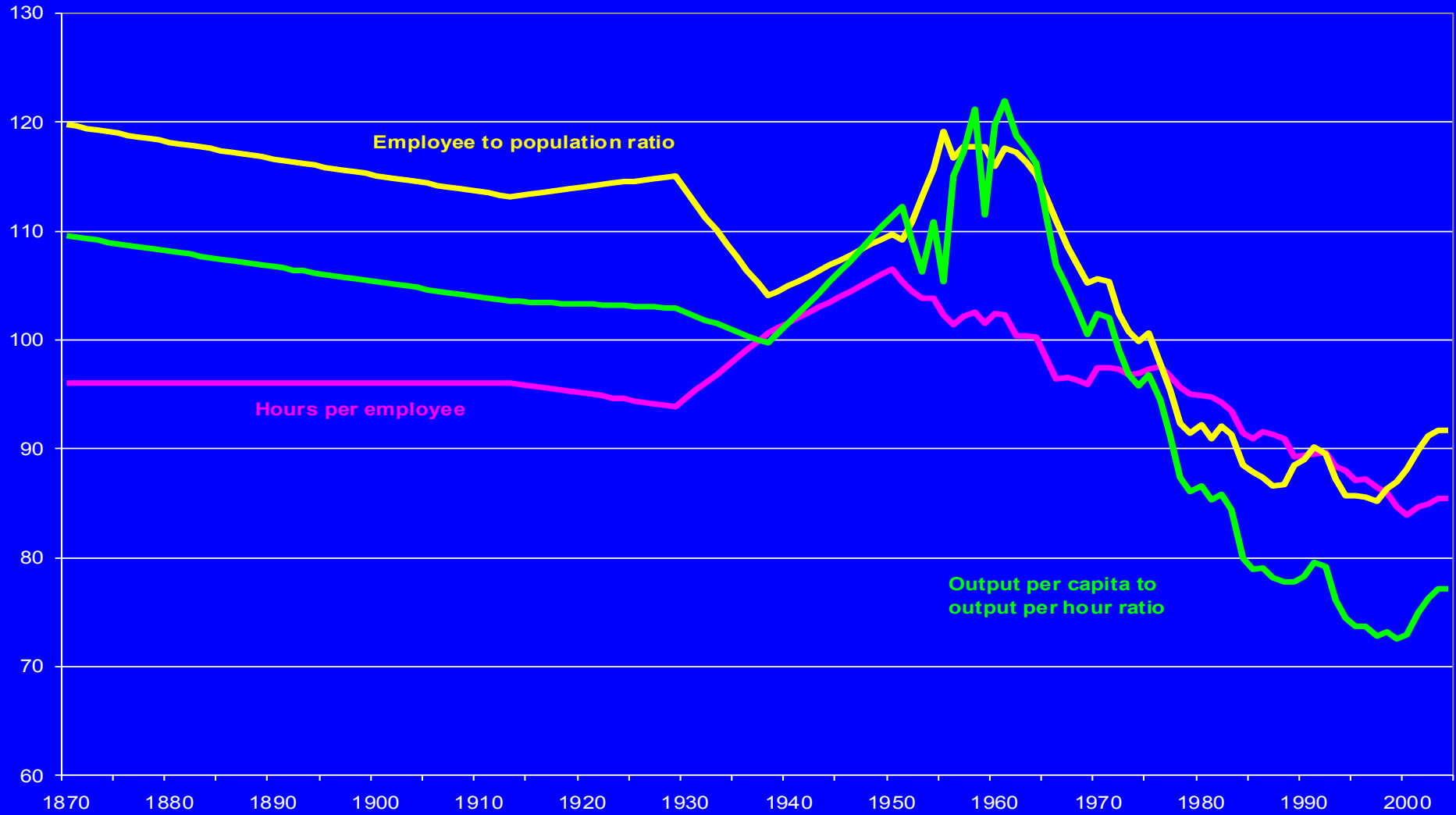
The Europe / US Ratios Are Much More Dramatic



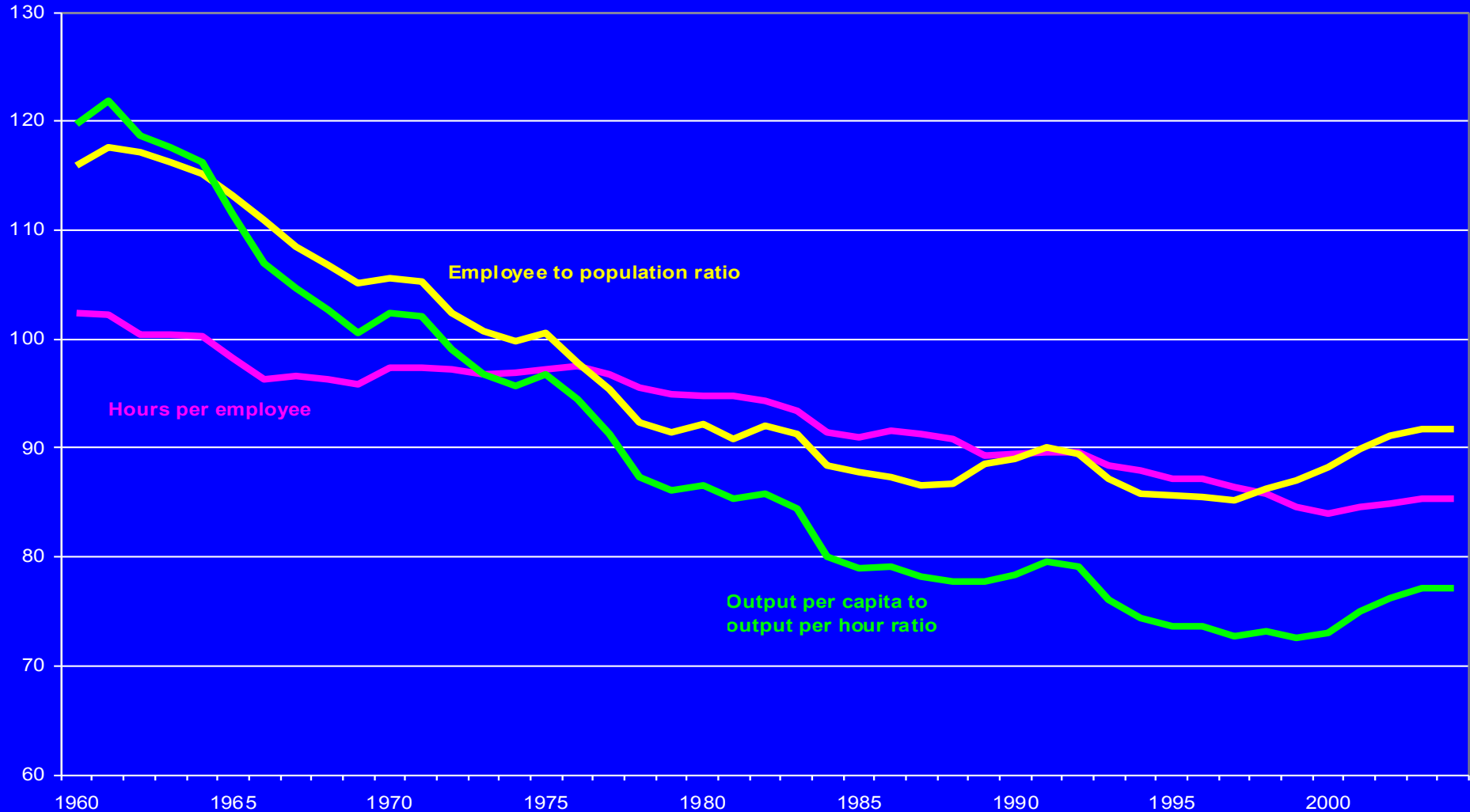
The Ratios Again: A Post-1960 Close-up



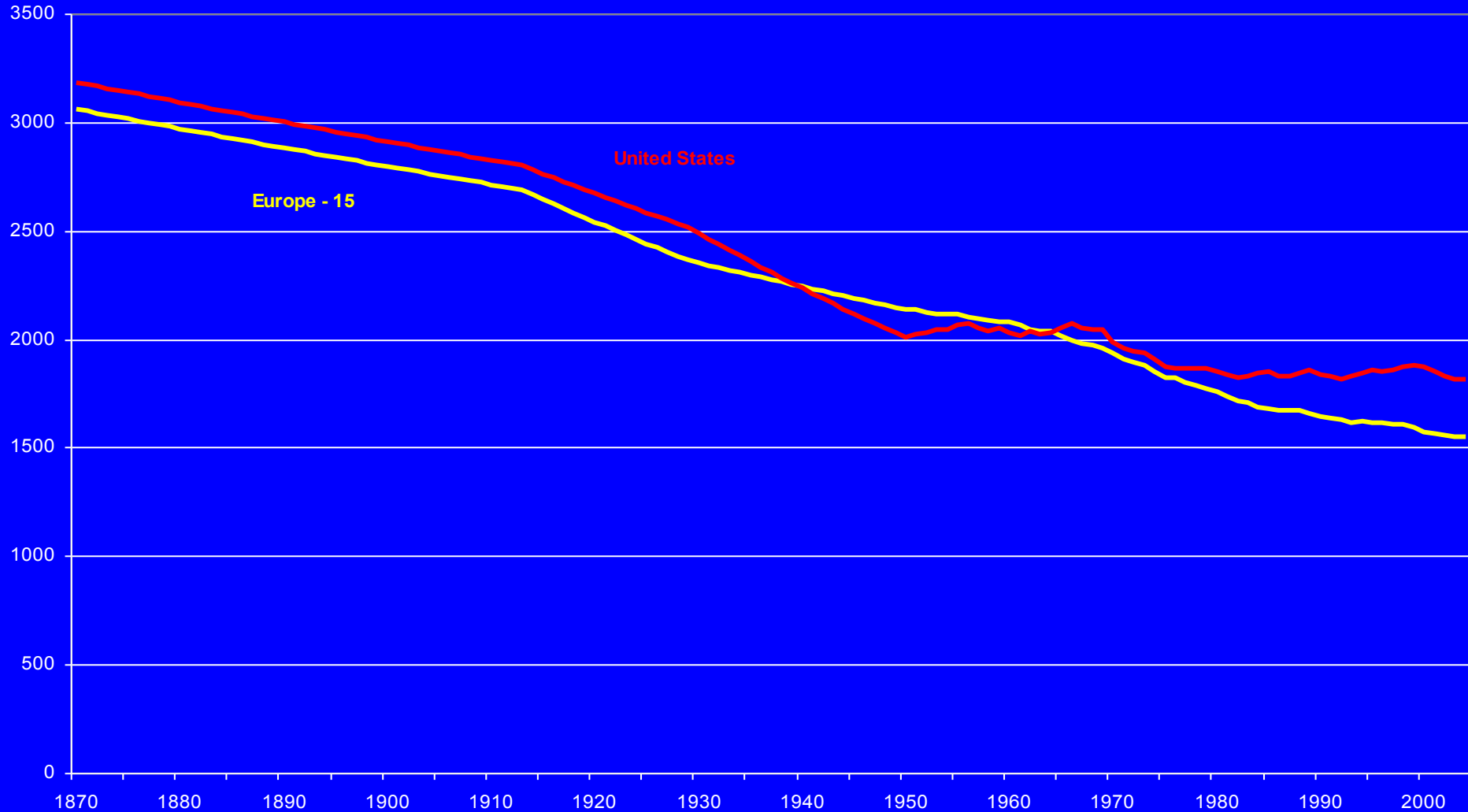
Ratios of Ratios: The Real Clue to What is Going On



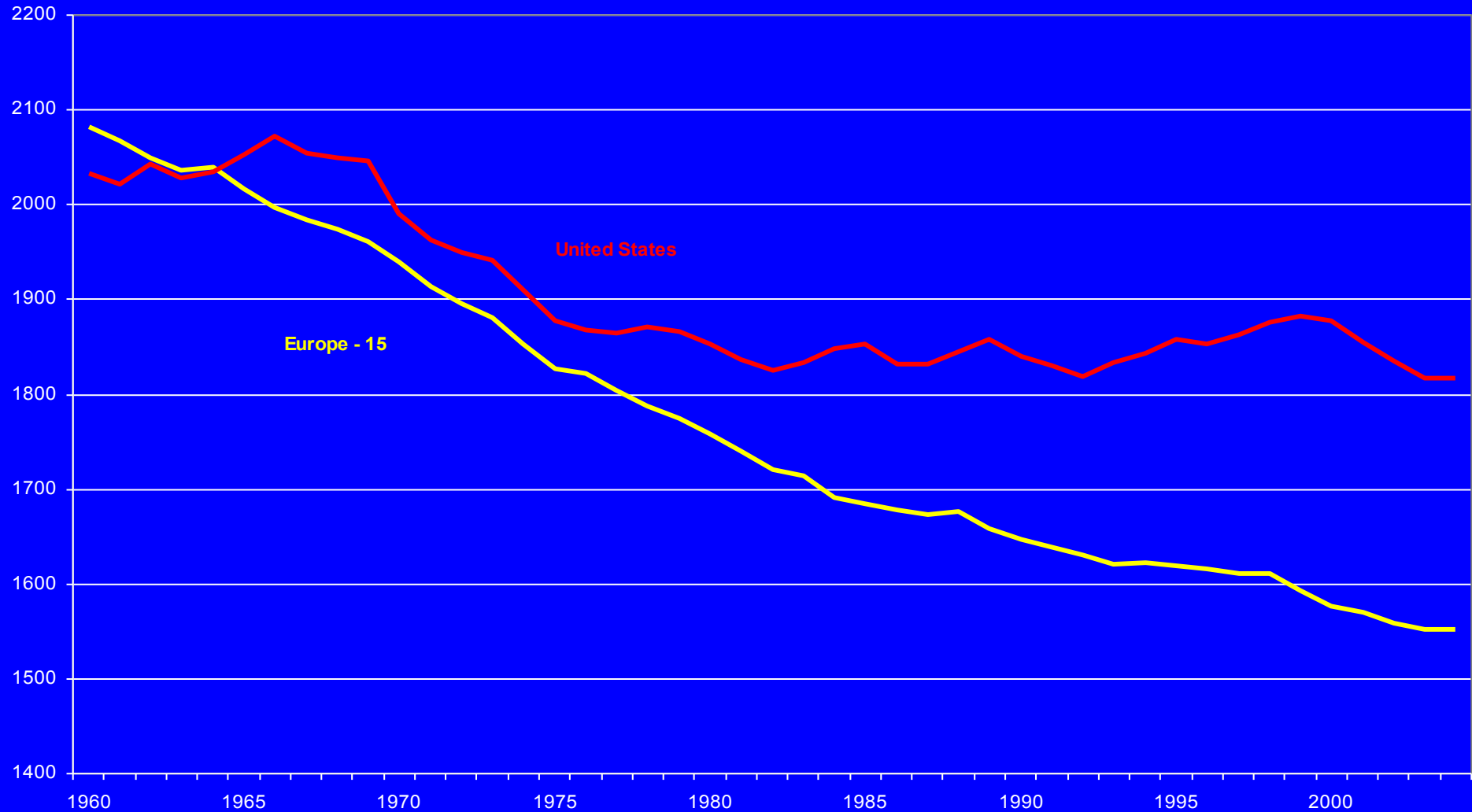
Ratios of Ratios: The Post-1960 Close-up



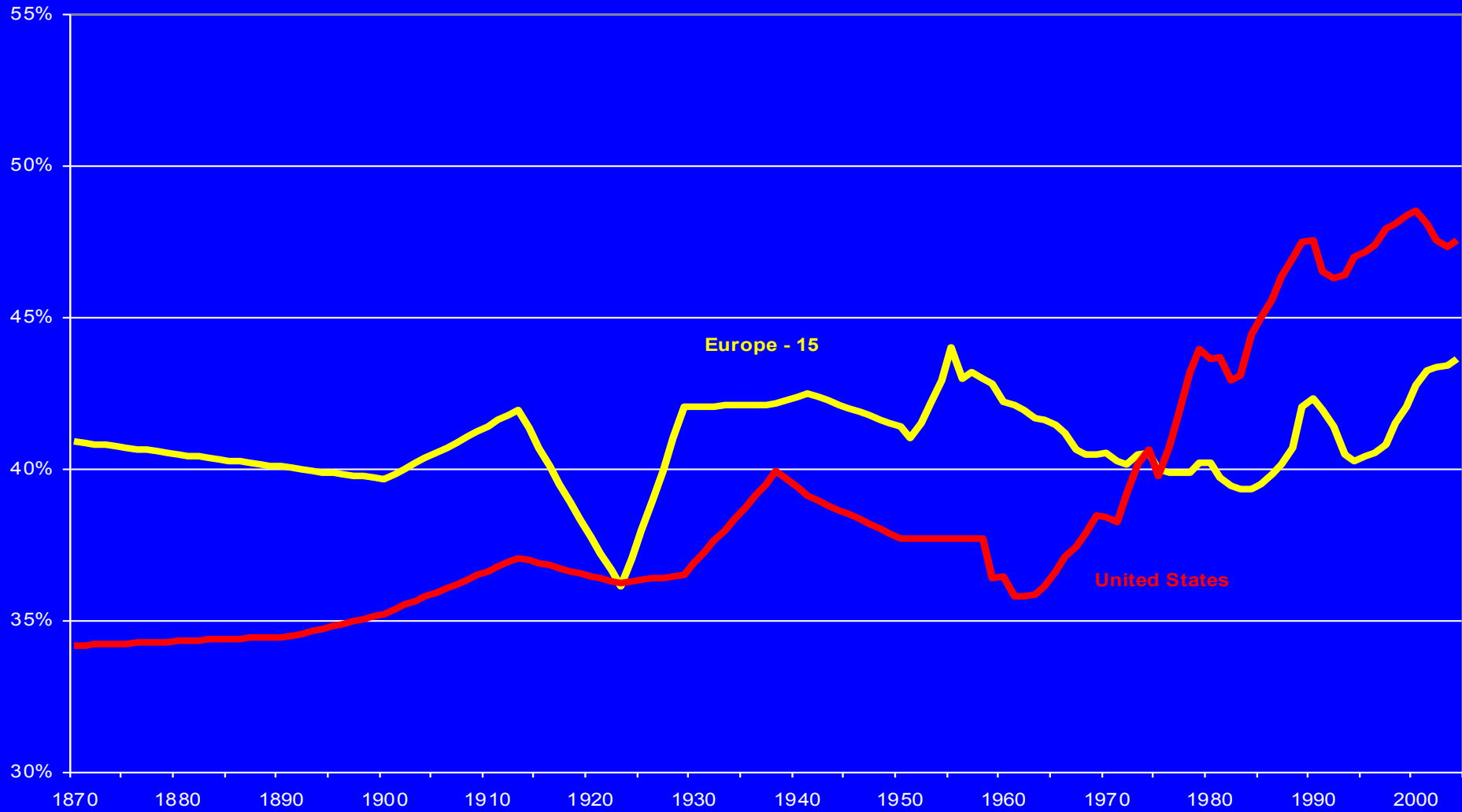
Hours per Employee Declined in Tandem until 1970, then diverged



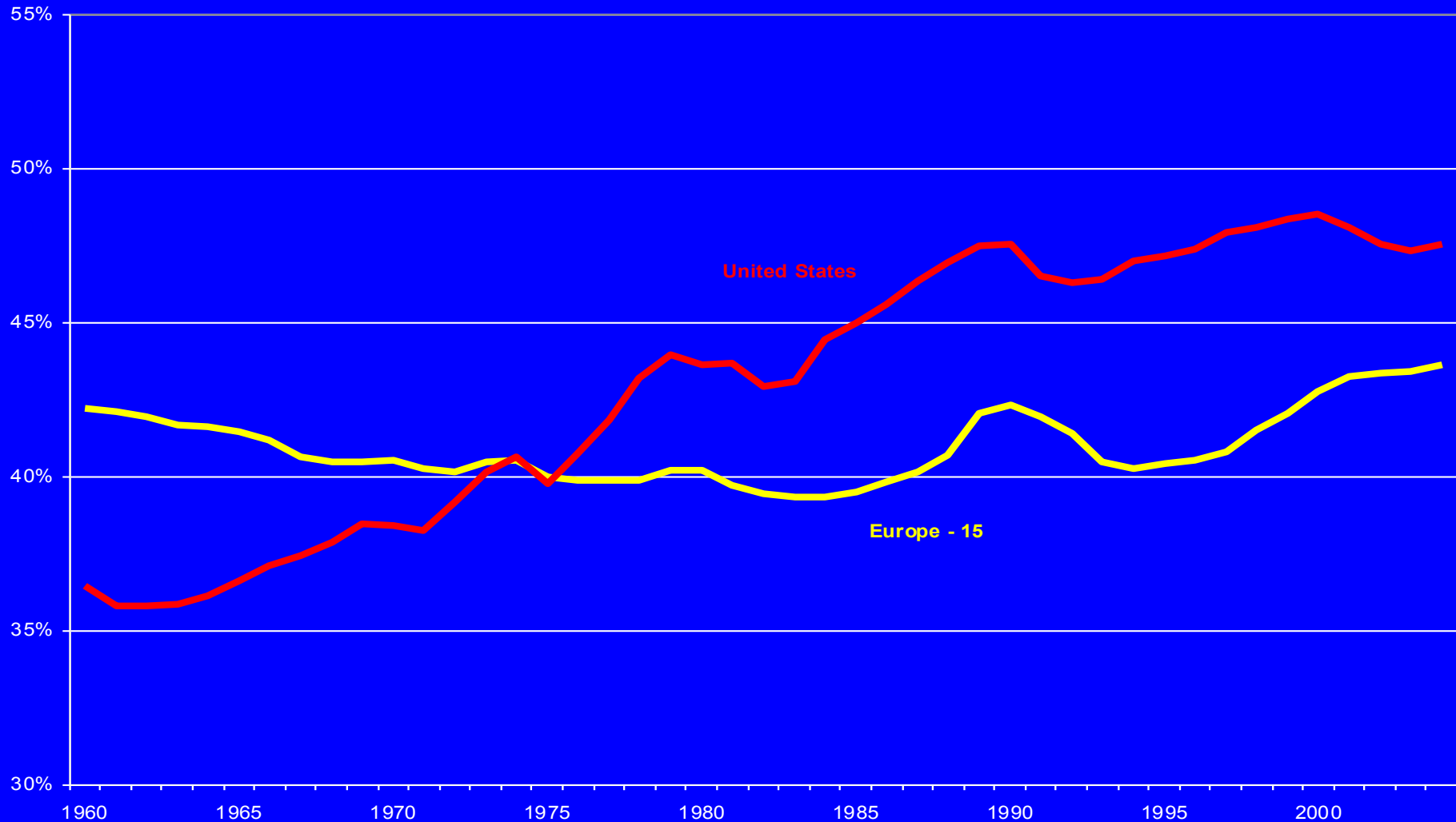
A Close-up of Hours per Employee after 1960



What Blanchard Neglects: Employment per Capita



Employment per Capita: The Postwar Close-up



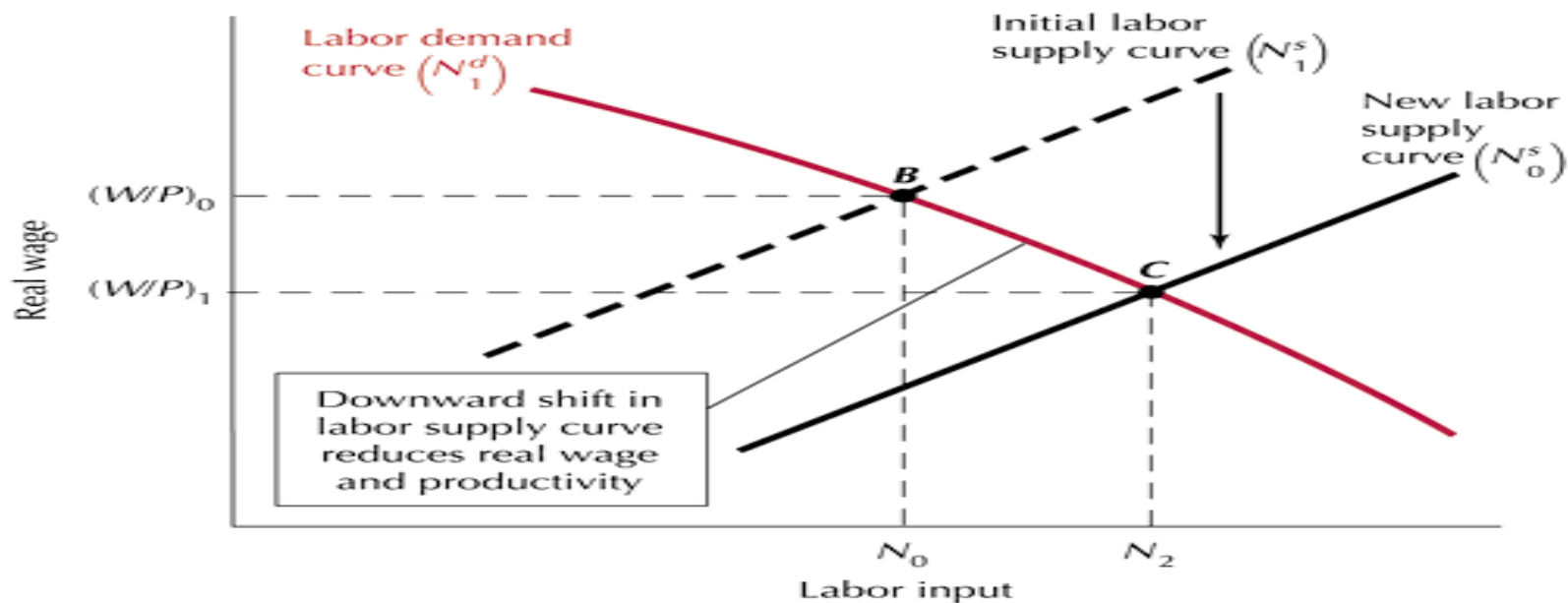
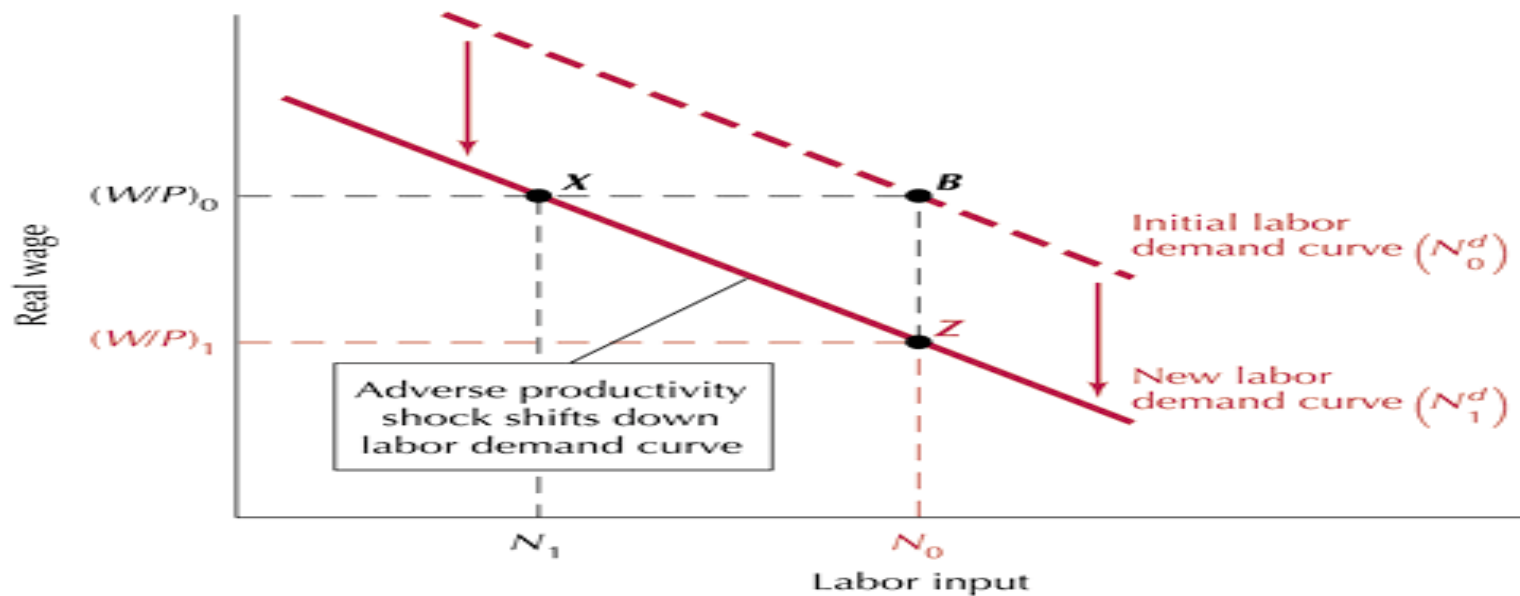
An Outline of Issues for Discussion

- Contra Blanchard, Europe's failure to converge is not a matter of voluntary vacations!
- Much more is low employment per capita
- Even lower hours are not entirely voluntary
- “If the French really wanted to work only 35 hours, why do they need the hours police?”
- Short hours are a victory for parliamentary politics, not for free choice

What Matters is Y_{pc} , not Productivity

- Europeans have “bought” their high productivity ratio with every conceivable way of making labor expensive
 - High marginal tax rates (payroll and income taxes)
 - Firing restrictions
 - Early retirement (55! 58!) with pensions paid for by working people

REAL WAGES AND PRODUCTIVITY:
WHICH IS THE CHICKEN AND WHICH THE EGG?



Europe's Low E/N Matters as much as Low A/E

- High Unemployment
 - High Youth Unemployment
 - High long-term Unemployment
- Low Labor-force Participation
 - Of Youth (defer to Phelps on Italian 30-year-olds)
 - Of Elderly
 - Would you believe these French and Italian retirement ages?
- The OFCE seminar I organized on this
 - Casual, just raise taxes
 - Casual, just raise retirement age
 - No Bush #43 hysteria

Welfare Issues to be Postponed for General Discussion

- GDP Exaggerates U. S. GDP per Capita
 - Extreme climate, lots of air conditioning, low petrol prices, huge excess energy use
 - U. S. urban sprawl: energy use, congestion
 - Crime, 2 million in prison
- Undeniable U. S. advantage, all those square feet
 - Inside the housing
 - Outside the housing in the residential lot sizes
- U. S. Medical Care Inefficiency
 - Raises Business Costs, like French taxes
 - Inefficiency, Insecurity

The History: Reorganizing an Old Story

- Organized by time, pre-1913, 1913-50, 1950+
- Within time periods, political union vs. other (USE device -- notice footnote 17)
 - Political union vs. “newness”
 - The heavy role of government in creating the late 19th century U. S. growth miracle
- Within time periods, reversible or nonreversible?

Political Union: Materials-intensive manufacturing

- Wright, raw materials
 - part of political union, not just natural endowment
 - US has advantage in resources vs. individual nations, but not all of Europe
 - No fear of Minnesota and Indiana going to war
 - Wright: doesn't emphasize enough ag, transport, trade
- Late 19th Century: The Dynamo of Chicago
 - Fastest Growing City in the World: 1870-1929
 - James Cronon's "Nature's Metropolis"
 - "Devil and the White City"

But it was not all Political Union: Even a USE Would Have Lagged

- Clear advantages of the New World (which U. S. uniquely? Which others (C, AU, NZ, Argentina?)
 - Agricultural
 - Land intensity indirectly responsible for ascendancy of American manufacturing
 - Newness
 - Common language, self-selection of ambitious immigrants, high motivation, labor mobility
 - American system of manufacturing (guns, watches, British anquish at Crystal Palace 1851)
 - Policy
 - Land for the railroads
 - The Homestead Act!

Post-1913: Exploiting the great inventions

- Vs. David-Wright on electricity in 1920s US mfg
 - Much more emph needed on ICE
 - Much more emph needed on 1930-50, not just 1920s
- Huge US lead in exploiting both electricity and ICE
 - U. S. in 1929 had 80% of world motor vehicle production
 - U. S. in 1929 had 90% of world motor vehicle registrations
- No mystery about the “Arsenal of Democracy”

Post-1913: The Great Compression

- Immigration
 - Restrictive legislation in the 1920s
 - A respite for low-skilled workers (compare now)
- Trade barriers
 - No importation of low-skilled labor via goods (compare now via China)
- New deal pro-union legislation
 - Pure rents for semi-skilled high-school drop-outs

World War II!

The Victory of the Arsenal

- The miracle occurred in an ad-hoc system of government loose control over business improvisation
- The basis was laid starting with Henry Ford in 1914
- Herbert Hoover did something good
- Role of the American system and the engineer
- References: Overy, Walton

Post WWII

- France: penetration of electricity and ICE: exactly 40 years later
 - That wonderful Landes quote
- Reversal of initial U. S. advantages
 - Raw materials
 - Political union
 - Newness depreciates
 - Reversal of the Great compression
- Did Europe do anything creative except catch up?
 - Welfare state
 - Combining auto with public transport

The Great Paradox: Europe's catching up stops after 1995

- 1973-95 Europe, starting 40 years late, continues to exploit great inventions
 - Copies U. S. interhighway system but retains railroads and builds TGV
- The teetering U. S. has run into diminishing returns
 - Old inventions, electricity and ICE, fade away
 - The Solow “computer paradox”
- 1995-2004. Europe's productivity growth doesn't revive, the great European funk.

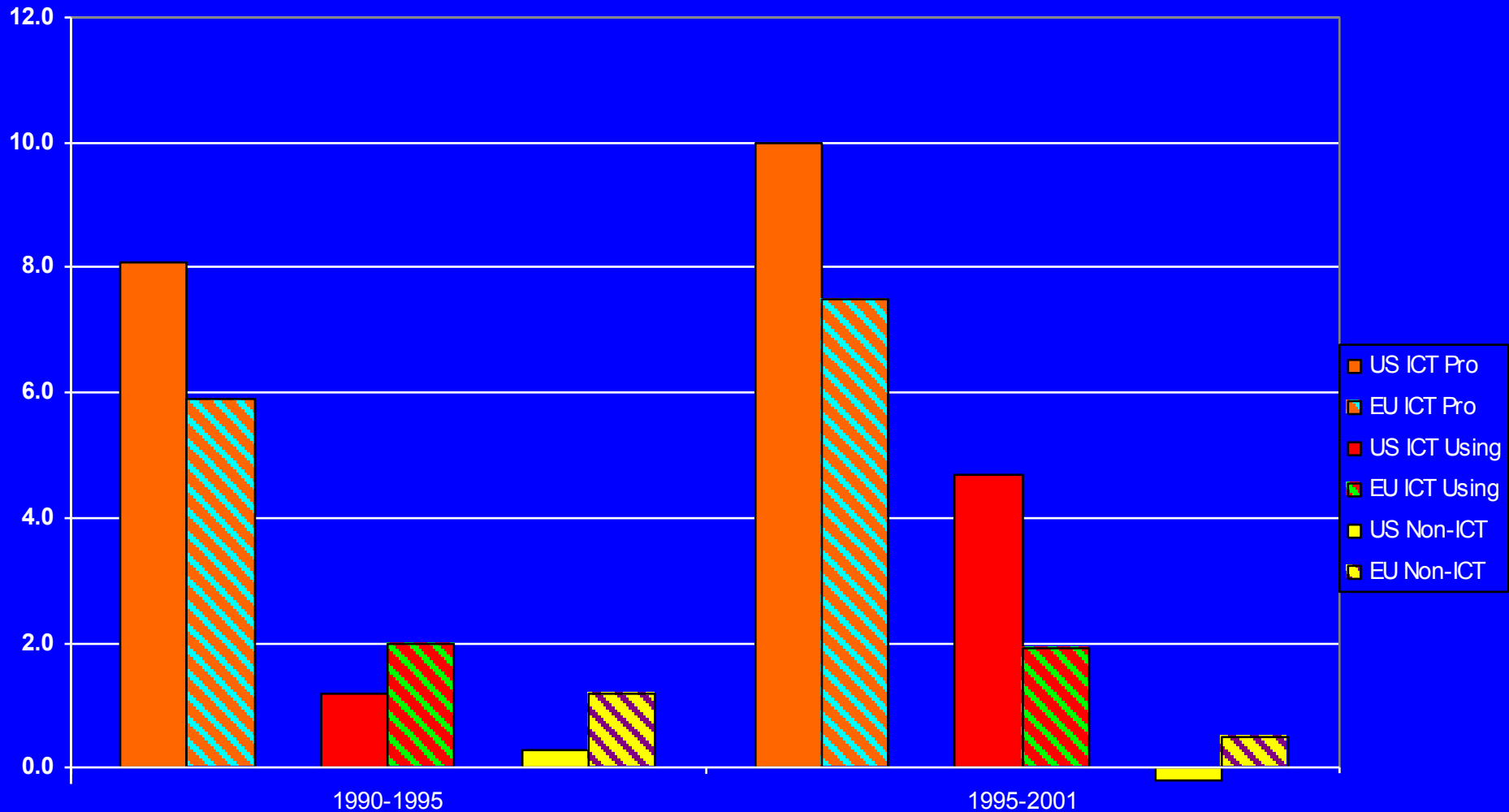
Topic #3: The Diagnosis

Basic Paradox about IT

- Both Europe and U. S. Rapidly Adopted New Economy Technology
 - Personal Computers
 - Web Access
 - Mobile Phones
- But Europe hasn't taken off
- Conclusion: Role of IT in U. S. revival must have been exaggerated

Finding the Culprit Industries

Output per Hour by Industry Group, EU and US, 1990-2003



Where is the Difference? The Van-Ark Decomposition

- Explaining the difference in Europe vs. US productivity growth post-1995
 - 55% retail trade
 - 24% wholesale trade
 - 20% securities
 - Rest of the economy: ZERO
- U. S. negative in telecom, backwardness of mobile phones

U. S. Retail Miracle

- Not uniform, concentrated in “large stores charging low prices with self-service format”
- *ALL* of productivity gains post-1990 attributable to *NEW* establishments and closing of old establishments
- Average pre-1990 establishment had *zero* productivity growth

Europe in Retailing

- Not uniform – Carrefour, Ikea
- U. S. “Big Boxes” (Wal-Mart, Home Depot, Best Buy, Target)
- Europe:
 - Land-use regulation, planning approval
 - Shop-closing restrictions on hours
 - Central-city congestion, protection of central-city shopping precincts
 - Prohibition on discounting by large new stores
 - Related to Phelps’ corporatism

Not enough emphasis on new vs. old

- It's not just that land-use planning prevents Wal-mart from setting up a new big box on every highway interchange in Europe
- It's that the MIX of retailing in Europe is heavily composed of small, old-fashioned firms

Education and University Research

- U. S. leadership in secondary education, 1910-40
- U. S. leadership in college education, post WWII
- U. S. research universities America's leading export industry even in dismal 1972-95, still the envy of the world
 - Competition between state and private
 - U. S. peer reviewed grants to young professors, not young students
 - Contrast with Europe tuition subsidies

Let's not Forget: Germany is being Strangled by Euro

- No more monetary policy
- If inflation soars in Portugal or Ireland, German workers are unemployed
- Fiscal policy is strangled by the 3% deficit rule
- Germany is MUCH MORE threatened by Poland and Czech than U. S. by Mexico
- Different immigration dynamics

Conclusion (for now)

- Economic research has focused on particular European problems
 - Land use vs. big boxes
 - Employment taxes and low empl per capita
- Bigger issues
 - Low fertility rate vs. retirement ages
 - Stark contrast: Czech/Poland vs. Mexico
 - Stark contrast: U. S. can absorb immigrants and Europe cannot